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PHALANGIDA

FROM

TROPICAL AMERICA

CLARENCE J. AND MARIE L. GOODNIGHT

FIELDIANA: ZOOLOGY
VOLUME 32, NUMBER 1
Published by
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CLARENCE J. AND MARIE L. GOODNIGHT
Department of Biology, Purdue University

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INTRODUCTION

Through the courtesy of the authorities of Chicago Natural History Museum we have been able to study the phalangid collections accumulated in the Museum's Division of Insects. This group of arachnids, often known as harvestmen or "daddy longlegs," has been much neglected, and every considerable collection proves to be rich in new genera and species. We are especially indebted to Mr. William J. Gerhard, Curator of Insects, and Mr. Rupert L. Wenzel and Mr. Henry S. Dybas, Assistant Curators, for friendly aid. The material studied includes the collections of Ivan T. Sanderson from British Honduras and Mexico, deposited in Chicago Museum; specimens collected in Mexico and Colombia by Henry S. Dybas; a small collection from Venezuela presented to the Museum by Padre Cornelio Vogl, of Caracas; and collections of phalangids made by Chief Curator Karl P. Schmidt in Honduras, Guatemala, and Peru.

This paper records collections of phalangids from Yucatan for the first time. As was to be expected, the Yucatan forms are closely related to those of southern Mexico. The first record from Mexico of the subfamily Stygnommatinae (Phalangodidae) is of unusual interest. The discovery of the new genus and species *Flaccus annulipes* adds to our knowledge of the distribution of this subfamily.

Two new members of the subfamily Phalangodinae (Phalangodidae), *Pellobunus granulosa* and *Paramitraceras chichivaca*, are described in this paper. *Junicus gerhardi* (Phalangodidae: Triacommatinae) adds to our information concerning the distribution of this relatively small subfamily.

Suborder **Laniatores** Thorell

Family **Phalangodidae** Simon

Subfamily **Phalangodinae** Roewer

Pellobunus granulosa sp. nov. Figure 1.

Type from Silkgrass, British Honduras. Deposited temporarily in the collection of Chicago Natural History Museum. Female. Collected November 17, 1939, by Ivan T. Sanderson.

Description of female.—Dorsum roughly granulate, truncate posteriorly as seen from above. Boundaries of dorsal areas parallel to one another; first area without a median line. Abdomen somewhat arched. Eye tubercle removed from the anterior margin of the cephalothorax, in the form of an elevated cone; also coarsely granulate and tipped by a hair that breaks off very easily. A transverse row of tubercles across each free tergite, all areas and free tergites without median armature. Venter and coxae roughly granulate,

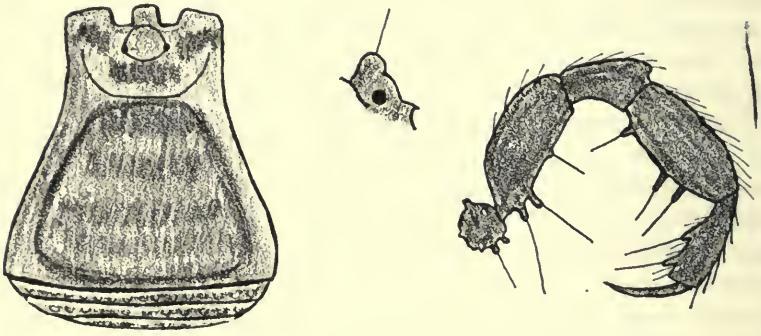

FIG. 1. *Pellobunus granulosa*. Dorsal view, lateral view of eye tubercle, and retrolateral view of palpus, all of female.

lateral teeth present on the anterior and posterior margins of coxae III. A transverse row of tubercles across each free sternite and small scattered tubercles on genital operculum. Spiracle not visible.

Legs clothed with a few scattered hairs. Entire leg, except tarsus, roughly granulate. A slightly swollen area in the median portion of the third metatarsus. Metatarsi not divided into astragali and calcanei. Tarsal segments 4–6–5–6. Distitarsus of first tarsus with two segments, of second with three segments.

LENGTH OF LEGS

	I	II	III	IV
	mm.	mm.	mm.	mm.
Trochanter	0.3	0.3	0.3	0.4
Femur	1.0	1.4	1.3	1.4
Patella	0.4	0.6	0.4	0.5
Tibia	0.6	1.3	0.9	1.3
Metatarsus	1.0	1.5	1.4	1.9
Tarsus	0.8	1.6	1.0	1.2
Total length	4.1	6.7	5.3	6.7

Palpus with the trochanter 0.2 mm. long, femur 0.8, patella 0.4, tibia 0.6, and tarsus 0.5. Total length 2.5 mm. Palpus armed retro-

laterally, as in figure 1. In addition, on the prolateral surface, an apical median tubercle on the femur and one on the median portion of the patella. Only two tubercles on the prolateral margin of the tibia. Tarsus armed similarly to the retrolateral surface.

Chelicerae normal, granulate, with scattered hairs.

Dorsum reddish brown, with darker brown mottlings on the abdomen and cephalothorax indefinitely outlining the median portions of the areas. Free tergites and genital operculum darker brown. Venter, coxae, and appendages light reddish brown. Dark brown mottlings on the legs, particularly on the tibiae and the metatarsi.

Total length of body 2.2 mm., cephalothorax 0.5, width of body at widest portion 1.9.

Remarks.—This species is most closely related to *Pellobunus roraima* Goodnight and Goodnight, differing in the shape of the eye tubercle, the presence of a hair on the eye tubercle, and the granulations on the dorsum.

Mexscotolemon acutus Goodnight and Goodnight

Mexscotolemon acutus Goodnight and Goodnight, Amer. Mus. Nov., No. 1163, p. 1, figs. 3–5, 1942—Vera Cruz, Mexico.

British Honduras: Chetumal, March 6, 1940 (Ivan T. Sanderson).

Paramitraceras chichivaca sp. nov. Figure 2.

Type from Chichivac, near Tecpan, Guatemala. In the collection of Chicago Natural History Museum. Female. Collected February 4, 1934, by Karl P. Schmidt.

Paratypes.—Three females, same data as the type. One deposited in the American Museum of Natural History.

Description of female.—Dorsal scute with five areas, their boundaries parallel and somewhat curved. All areas thickly covered with small tuberculations. First area without a median line. A conspicuous bulge on either side at anterior lateral portion of the dorsal scute. Free tergites, each with a transverse row of hair-tipped tubercles. All dorsal areas and free tergites without median armature. Eye tubercle on the anterior margin of the cephalothorax, in the form of a sharply pointed cone curving anteriorly. Eyes situated at the base of the eye tubercle. Cephalothorax granulate, but lacking the heavy granulations of the abdomen. Venter and coxae finely granulate, with scattered tuberculations. A transverse

row of larger tubercles across coxae I. Lateral teeth present on anterior and posterior margins of coxae III. A transverse row of small tubercles across each free sternite and scattered tuberculations on the genital operculum. Spiracles usually visible, but sometimes covered by a chitinous projection.

Legs clothed throughout with hairs. Small tuberculations on the femora, patellae, and tibiae. Fourth femora curved. Tarsal segments 3–4–5–5. Distitarsus of first tarsus with two segments, of second with two segments.

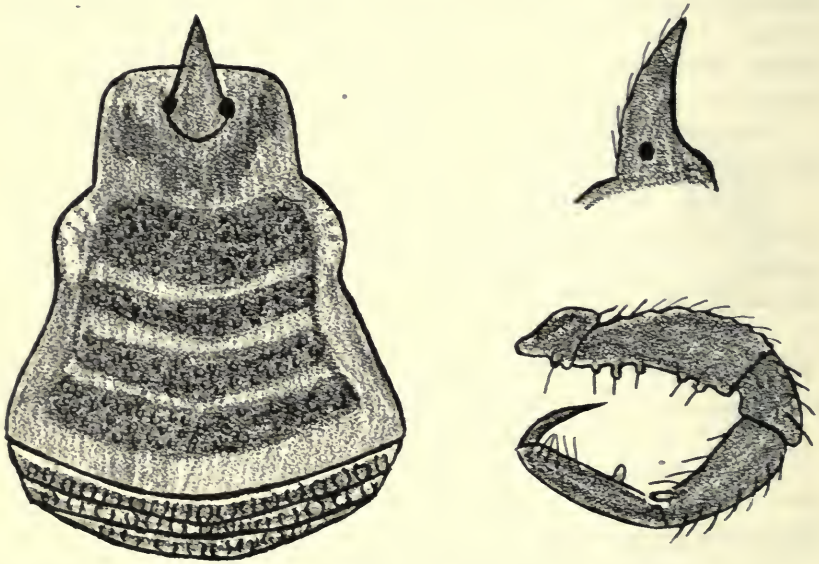

FIG. 2. *Paramitraceras chichivaca*. Dorsal view, lateral view of eye tubercle, and retrolateral view of palpus, all of female.

LENGTH OF LEGS

	I	II	III	IV
	mm.	mm.	mm.	mm.
Trochanter	0.4	0.5	0.6	0.6
Femur	1.9	2.4	2.0	2.7
Patella	0.7	1.0	0.8	1.1
Tibia	1.3	1.9	1.7	2.3
Metatarsus	1.4	2.0	2.0	2.9
Tarsus	1.0	1.4	1.1	1.1
Total length	6.7	9.2	8.2	10.7

Palpus with the trochanter 0.6 mm. long, femur 1.4, patella 0.7, tibia 1.1, and tarsus 1.2. Total length 5.0 mm. Palpus armed retro-

laterally, as in figure 2. Prolaterally, femur unarmed; patella unarmed; distal portion of tibia with an apical projection similar to that on the retrolateral side, but slightly larger; tarsus with a single blunt projection near the proximal portion, this projection visible from the retrolateral view, although the retrolateral surface is unarmed. Entire palpus thickly covered with scattered hairs.

Chelicerae with scattered hairs. Distal segments wedge-shaped, slightly enlarged.

Dorsum reddish brown, darker brown at the lateral margins and on the free tergites. Venter, coxae, and appendages reddish brown, darker brown on the legs except the tarsi, which are lighter.

Total length of body 5.1 mm., cephalothorax 1.5, width of body at widest portion 4.1.

Remarks.—*P. chichivaca* is related to *P. granulatus* Cambridge and *P. hispidulus* Cambridge, but it differs in the degree of granulation on the dorsum and the armature of the palpus.

Potosa gen. nov.

Genotype *Potosa dybasi* sp. nov.

Diagnosis.—Dorsum with five distinct areas, a median spine present in areas II and III, remaining areas and free tergites without median armature. First area without a median line. Eye tubercle with a median spine, separated from the anterior margin of the cephalothorax. Tarsal segments 4–6–6–6. Distitarsus of first tarsus with two segments, of second with three segments.

Remarks.—This genus is related to *Spinolatum* Goodnight and Goodnight, differing in the number of tarsal segments, the dorsal armature, and the position of the eye tubercle.

Potosa dybasi sp. nov. Figure 3.

Type from Huichihuayan, San Luis Potosí, Mexico. In the collection of Chicago Natural History Museum. Male. Collected June 20, 1941, by Henry S. Dybas.

Paratype.—Same data as the type. Collected by Dr. Charles H. Seevers. Deposited in the American Museum of Natural History.

Description of male.—Abdomen widely expanded in the median portion; boundaries of areas of the abdominal scute not parallel. First area without a median line. Median portion of first three areas very slightly elevated, a small median spine present on second and third areas. Second to fifth areas with a transverse row of heavy

tubercles. First area with numerous scattered small tubercles; widened laterally. A row of tubercles present along the lateral margin of the abdominal scute. A large blunt tubercle projecting from the lateral margin of the scute at the posterior portion of the first area. A transverse row of tubercles across each free tergite. A small spine on either side at the lateral margin of the first and second free tergites. A somewhat larger tubercle at the lateral posterior margin of the fifth area. Cephalothorax with two spinules on either side at the anterior lateral margin. Eye tubercle in the middle of the cephalothorax, low, with a vertical median spine extending from the eye tubercle. Several small tuberculations on the eye tubercle and a series of small tuberculations just posterior. Venter and coxae roughly granulate, coxae covered with heavy tuberculations. A transverse row of large hair-tipped tubercles across each free sternite. Anal operculum thickly covered with tuberculations. Lateral teeth present on anterior and posterior margins of coxae III. Coxae IV widely expanded; the lateral portion of the coxae visible dorsally, thickly covered with unusually large hair-tipped tubercles, and tipped distally with a spine. Spiracles visible.

Legs clothed throughout with hairs. All segments of the legs, except the tarsi, with numerous tuberculations, which are particularly prominent on the fourth femora, patellae, and tibiae. Fourth trochanters with large tuberculations and with still larger tuberculations on the prolateral and retrolateral margins. Third and fourth femora curved. Tarsal segments 4–6–6–6. Distitarsus of first tarsus with two segments, of second with three segments.

LENGTH OF LEGS

	I	II	III	IV
	mm.	mm.	mm.	mm.
Trochanter	0.4	0.4	0.7	0.5
Femur	1.4	2.2	1.6	2.2
Patella	0.5	0.8	0.7	0.9
Tibia	1.0	1.8	1.3	2.2
Metatarsus	1.4	1.7	1.5	2.6
Tarsus	0.8	1.6	1.2	1.3
Total length	5.5	8.5	7.0	9.7

Palpus with the trochanter 0.4 mm. long, femur 1.0, patella 0.6, tibia 0.8, and tarsus 0.6. Total length 3.4 mm. Palpus armed retrolaterally, as in figure 3; femur with an apical median hair-tipped tubercle prolaterally, the patella with a large hair-tipped tubercle and a smaller tubercle on either side, the tibia with an additional small tubercle; otherwise as in retrolateral view, the tarsus armed

similar to the retrolateral surface. Dorsal surface of the femur with numerous tuberculations.

Chelicerae slightly enlarged, proximal segment somewhat thickened and with scattered dorsal granulations.

Penis extruded, straight, thickened at the distal portion. Total length 1.8 mm. Sheath 0.7 mm. long.

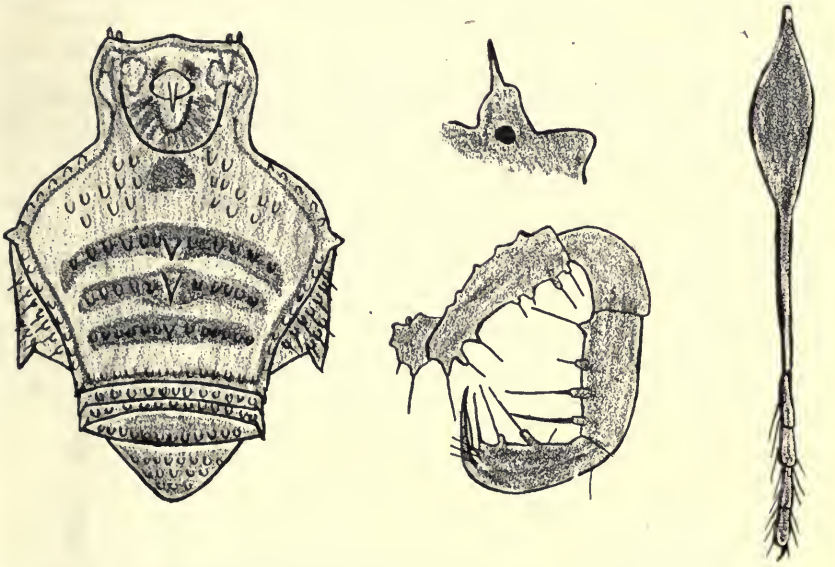

FIG. 3. *Potosa dybasi*. Dorsal view, lateral view of eye tubercle, retrolateral view of palpus, and lateral view of metatarsus and tarsus of first leg, all of male.

Dorsum reddish brown with darker brown in the median portion of the areas, free tergites, and the lateral margin of the abdomen. Darker mottlings on the cephalothorax; the median portion of the first three areas darker. Venter and coxae reddish brown, somewhat lighter. Appendages reddish brown with many darker brown mottlings.

Total length of body 3.3 mm., cephalothorax 1.1, width of body at widest portion 2.5.

Subfamily **Stygnommatinae** Roewer

Flaccus gen. nov.

Genotype *Flaccus annulipes* sp. nov.

Diagnosis.—Dorsum with five distinct areas, areas and free tergites without median armature. Cephalothorax without a com-

mon eye tubercle and without spines or a median elevation. Tarsal segments 5–more than 6–6–6. Distitarsus of first tarsus with two segments, of second with three segments.

Remarks.—Flaccus is related to *Antagona* Goodnight and Goodnight, differing in the number of tarsal segments and in not having median dorsal armature.

Flaccus annulipes sp. nov. Figure 4.

Type from Tierra Blanca, Vera Cruz, Mexico. In the collection of Chicago Natural History Museum. Male. Collected July 28, 1941, by Henry S. Dybas.

Description of male.—Abdomen strongly arched. Five areas on the dorsum. First area without a median line. Boundaries of the areas parallel to one another. Entire dorsum roughly granulate, a transverse row of large tubercles across each area and each free tergite. Median tubercles, particularly on third and fourth areas, somewhat larger, but scarcely standing out sufficiently to be considered median armature. Cephalothorax without a common eye tubercle,

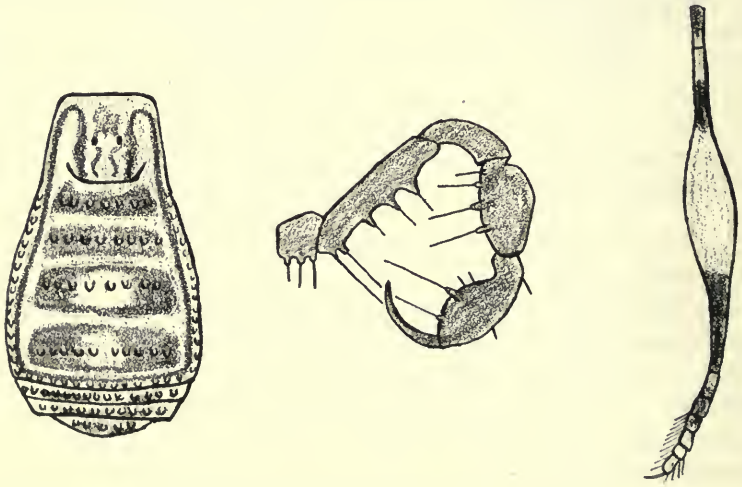

FIG. 4. *Flaccus annulipes.* Dorsal view, retrolateral view of palpus, and metatarsus and tarsus of third leg, all of male.

although with eyes relatively close together (only about 0.3 mm. apart). Cephalothorax smooth, without median spines. Anterior margin straight, without armature. A row of very small tubercles along the lateral portion of the abdomen. Venter and coxae roughly

granulate, a transverse row of larger tubercles across the first coxae, a few lateral teeth present on anterior and posterior margins of coxae III. A transverse row of tubercles across each free sternite. Anal operculum with scattered tuberculations. Coxae IV widened laterally, with thick granulations on the dorsal portion, but without an apical spine. Spiracles partially hidden beneath coxae IV.

Legs with scattered hairs. Trochanters, femora, patellae, and tibiae with tuberculations, which are very prominent on third and fourth legs. Third and fourth femora slightly curved. Third metatarsus with a median enlargement. A false articulation on the third metatarsus. Tarsal segments 5–7–6–6. Distitarsus of first tarsus with two segments, of second with three segments.

LENGTH OF LEGS

	I	II	III	IV
	mm.	mm.	mm.	mm.
Trochanter	0.2	0.4	0.4	0.4
Femur	1.0	1.8	1.4	1.7
Patella	0.4	0.5	0.4	0.5
Tibia	0.6	1.6	1.0	1.4
Metatarsus	0.9	1.9	1.4	2.0
Tarsus	0.6	1.5	0.9	1.0
Total length	3.7	7.7	5.5	7.0

Palpus with the trochanter 0.3 mm. long, femur 0.6, patella 0.4, tibia 0.4, and tarsus 0.4. Total length 2.1 mm. Palpus armed retrolaterally, as in figure 4. Prolaterally, with two spine-bearing tubercles at the distal portion of the femur, one of which may be considered an apical median spine, and a very small tubercle at the median portion; patella with an apical median tubercle and another very small tubercle proximal to it; tibia with two large and one small tubercle; tarsus armed similarly to the retrolateral surface.

Chelicerae tuberculate, with scattered hairs. Jaws strongly curved toward the median line. Proximal segments with only very slight elevations.

Dorsal surface of the abdomen dark brown on either side, with a median light brown marking, this distinction of color not very definite on first and second areas, the dark markings of these areas extending completely across with the lighter markings at the extreme lateral margin. Cephalothorax very mottled, with an intricate interlacing of darker and lighter areas. Venter and coxae light yellowish except for the lateral portions of the free sternites and anal operculum, which are dark. Dorsal portion of coxae IV with a conspicuous dark spot. Legs yellowish, with dark brown bands, giving an

annulate appearance, particularly as seen macroscopically. Third and fourth tarsi with the proximal portion dark and the distal portion light. Chelicerae yellowish; palpi very light, almost white.

Total length of body 2.2 mm., cephalothorax 0.7, width of body at widest portion 1.6.

Subfamily **Triacommatinae** Roewer

Junicus gen. nov.

Genotype *Junicus gerhardi* sp. nov.

Diagnosis.—Dorsum with five areas; all dorsal areas, first and second free tergites and anal operculum without median armature. Third free tergite with a median spine. Eye tubercle with a median spine, not on the anterior margin of the cephalothorax. Boundaries of dorsal areas not parallel. First area with a median line. Tarsal segments 6–remaining with more than six segments. Distitarsus of first tarsus with three segments, of second with three segments. Femur of the palpus without dorsal apical or apical median spines.

Remarks.—*Junicus* is related to *Gephyropachylus* Mello-Leitão, but lacks the paired tubercles on the third and fourth areas and has a median spine on the third free tergite.

Junicus gerhardi sp. nov. Figure 5.

Type from Lake Junín, Peru. In the collection of Chicago Natural History Museum. Male. Collected October 22, 1939, by Karl P. Schmidt.

Paratypes.—Eleven males and females, same data as the type. Four deposited in the collection of the American Museum.

Description of male.—Dorsum finely granulate, almost smooth, first dorsal area with a median line; all dorsal areas and first and second free tergites without median armature. Third free tergite with a single median spine. A transverse row of tubercles across the fifth area and the free tergites and along the lateral margins of the abdominal scute. Cephalothorax much narrower than the abdomen, with a median anterior tubercle between the chelicerae. Odoriferous glands on the lateral margin, slightly projecting. Eye tubercle removed from the anterior margin approximately one-third the length of the cephalothorax, and tipped with a short median spine. Dorsal scute wider than long, giving a somewhat oval outline. Venter and coxae with scattered hairs. A transverse row of small tubercles across each free sternite. Scattered small tubercles

on the anal operculum. Coxae IV much widened, prolonged into a large dorsal distal spine. Spiracles visible.

Legs clothed throughout with hairs, the third and fourth tarsi very hairy. Femora, patellae, and tibiae with scattered tuberculations. Fourth leg with heavy tuberculations, the trochanter with a large retrolateral spine. Femur with a row of large tubercles

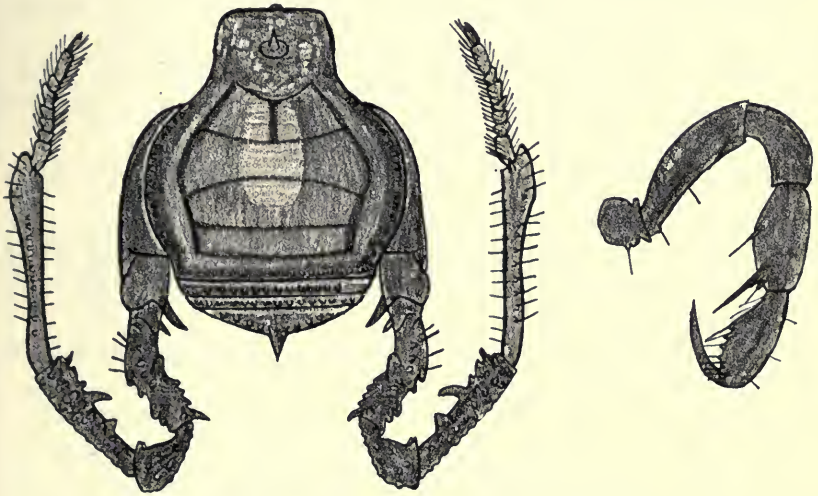

FIG. 5. *Junicus gerhardi*. Dorsal view of male, with pair of legs, and retrolateral view of palpus.

on the prolateral margin, dorsally with a small proximal spine, a large median spine, and one distal spine; retrolaterally, with tubercles and a large distal spine. Patella with several large ventral tuberculations and a larger retrolateral spine. Tibia very tuberculate, with a large retrolateral spine in the median portion. Metatarsus somewhat enlarged at the distal portion and with two short spines at the distal portion. Tarsal segments 6–8–7–7. Distitarsus of first tarsus with three segments, of second with three segments.

LENGTH OF LEGS

	I	II	III	IV
	mm.	mm.	mm.	mm.
Trochanter	0.4	0.7	0.9	1.1
Femur	1.9	3.2	2.5	3.6
Patella	1.0	1.4	1.5	1.7
Tibia	1.5	2.3	1.9	3.2
Metatarsus	2.2	3.1	2.7	5.0
Tarsus	1.4	2.6	1.5	1.8
Total length	8.4	13.3	11.0	16.4

Palpus with the trochanter 0.5 mm. long, femur 1.2, patella 0.6, tibia 0.9, and tarsus 0.9. Total length 4.1 mm. Palpus armed retrolaterally, as in figure 5. Femur and patella entirely unarmed. Prolaterally, four sharp spines on tibia and four similar spines on tarsus.

Chelicerae normal, with scattered hairs. Proximal segment only very slightly elevated.

Dorsum brownish black and with a yellowish color on the median portion of the first three areas. Venter and coxae dark. Legs, except for the metatarsi and the tarsi, dark brownish black. Metatarsi and tarsi of legs and the entire palpus yellowish. Chelicerae dark at the proximal portion and lighter at the distal.

Total length of body 6.8 mm., cephalothorax 1.8, width of body at widest portion 5.1.

Description of female.—Similar to male, but with the spines of the fourth leg reduced to tubercles and the median spine of the third free tergite lacking.

Total length of body 9.0 mm., cephalothorax 1.8, width of body at widest portion 5.1.

Family **Cosmetidae** Simon

Subfamily **Cosmetinae** Cambridge

Acromares roeweri sp. nov. Figure 6.

Euerginus serratotibialis (Cambridge) Roewer, Die Weberknechte der Erde, p. 362, figs. 428, 429, 1923—Honduras (Belize).

Type from Tekom, Yucatan, Mexico. Temporarily deposited in the collection of Chicago Natural History Museum. Male. Collected April 20, 1940, by Ivan T. Sanderson.

Paratypes.—Two females, same data as the type. Temporarily deposited in the collection of Chicago Natural History Museum.

Description of male.—Dorsum smooth, a pair of very low spines on the fourth area, remaining areas and free tergites unbedecked. Free tergites without transverse rows of tubercles. Eye tubercle low, unarmed. Venter and coxae finely granulate. A transverse row of small tubercles across each free sternite and one across the surface of coxae I. Coxae III with a few anterior and posterior teeth at their distal portion. A large tubercle at the anterior lateral portion of coxa IV, also a dorsal distal spine present. Anal operculum granulate.

Legs clothed throughout with hairs, a few small tubercles on the first, second, and third femora. Third and fourth femora curved, somewhat enlarged. A distal spine on the retrolateral margin of the fourth trochanter. A prolateral row of larger tubercles on the fourth femur. Two larger spines and numerous tubercles on the retrolateral margin of the patella. Tibia with a prolateral row of spines, a row of four or five spines at the proximal portion of the retrolateral margin, and a median row of spines, making three rows in all. Tarsal segments 6–9–7–7. Distitarsus of first tarsus with three segments, of second with three segments. Basitarsus of first tarsus enlarged.

LENGTH OF LEGS

	I	II	III	IV
	mm.	mm.	mm.	mm.
Trochanter	0.6	0.8	0.8	0.9
Femur	2.5	5.1	3.8	5.0
Patella	1.1	1.1	1.0	1.9
Tibia	1.9	3.2	2.0	3.3
Metatarsus	3.0	5.1	3.9	5.4
Tarsus	1.8	3.6	1.9	2.2
Total length	10.9	18.9	13.4	18.7

Palpus with the trochanter 0.9 mm. long, femur 1.5, patella 1.1, tibia 1.4, and tarsus 0.9. Total length 5.8 mm. Palpus characteristically flattened. A ventral row of teeth on the femur. Tibia very widely flattened, with a row of small granulations on the dorsal portion. A few very small spinules on the dorsal margin of the patella and one spinule on the dorsal distal portion of the femur.

Chelicerae somewhat enlarged. Proximal segment with a row of four or five spinules at the proximal portion and a prolateral spinule at the distal portion. Distal segment with a very slight elevation.

Dorsum reddish brown, with a large white splotch on either side of the cephalothorax and another large white spot on either side at the median portion of the abdomen. A few irregular white markings just posterior to this abdominal spot. A transverse row of very small white flecks across the fifth area and each free tergite. A row of indefinite pale spots separating the first three dorsal areas with occasional small white flecks in these light spots. A few light flecks present on the cephalothorax and on the eye tubercle in one specimen. Venter and coxae reddish brown, appendages somewhat lighter. Anal operculum without white markings.

Total length of body 6.9 mm., cephalothorax 1.8, width of body at widest portion 5.8.

Description of female.—Similar to male, but with only granulations on the fourth leg; also lacking the enlarged basitarsus of the first tarsus.

Total length of body 8.2 mm., cephalothorax 2.2, width of body at widest portion 6.4.

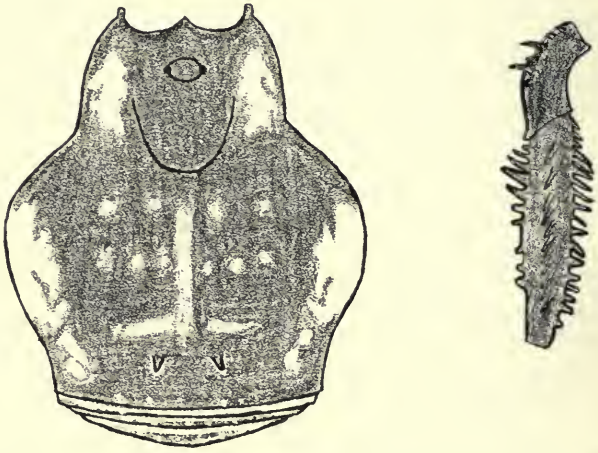

FIG. 6. *Acromares roeweri.* Dorsal view and ventral view of patella and tibia of fourth leg, both of male.

Remarks.—Roewer has apparently described this species, considering it identical with Cambridge's *Erginus serratotibialis.* However, this animal differs in both leg spination and color pattern. It is closely related to *Acromares vittatum* Goodnight and Goodnight, differing in the leg spination and the dorsal color pattern.

Acromares vittatum Goodnight and Goodnight

Acromares vittatum Goodnight and Goodnight, Amer. Mus. Nov., No. 1184, p. 7, figs. 36, 37, 1942—British Honduras (Benque Viejo).

British Honduras: Silkgrass, December 5, 1939 (Ivan T. Sanderson); Bokowina, November 12, 1939 (Ivan T. Sanderson); Kate's Lagoon, February 21, 23, and 27, 1940 (Ivan T. Sanderson); Stann Creek Valley, January 12 and 17, 1940 (Ivan T. Sanderson); Belize, July 5, 1923 (Karl P. Schmidt) and September 21 and 23, 1939 (Ivan T. Sanderson).

Bokwina gen. nov.

Genotype *Bokwina sandersoni* sp. nov.

Diagnosis.—Paired spines on the third area, remaining areas and free tergites without median armature. Third and fourth legs not conspicuously enlarged over the first and second. Tarsal segments 5–more than 6–6–6. Distitarsus of first tarsus with three segments, of second with three segments. Secondary sexual characteristics of the male in the enlarged basitarsus of the first tarsus.

Remarks.—This genus is related to *Poala* Goodnight and Goodnight, but differs in that it has spines rather than tubercles on the third area.

Bokwina sandersoni sp. nov. Figure 7.

Type from Bokowina, British Honduras. Deposited temporarily in the collection of Chicago Natural History Museum. Male. Collected November 1, 1939, by Ivan T. Sanderson.

Paratype.—A female, same data as the type. Deposited temporarily in the collection of Chicago Natural History Museum.

Description of male.—Dorsum roughly granulate, a pair of short, slightly curved spines present on the third area, these spines close together, being only 0.3 mm. apart at their bases. Remaining areas and free tergites without median armature. Fifth area and free tergites with a transverse row of tubercles. Venter and coxae finely granulate, a transverse row of small tubercles across coxae I and a transverse row across each of the free sternites. A few small tubercles on the anal operculum. A blunt projection at the distal posterior portion of coxae II and III and at the anterior portion of coxae IV. The projection of coxae IV very close to the one on coxae III.

Legs clothed throughout with hairs. A few small tubercles present on the femora. Fourth femora slightly curved. Tarsal segments 5–10–6–6. Distitarsus of first tarsus with three segments, of second with three segments. Basitarsus of first tarsus slightly enlarged.

LENGTH OF LEGS

	I	II	III	IV
	mm.	mm.	mm.	mm.
Trochanter	0.3	0.4	0.4	0.4
Femur	1.6	2.7	2.0	2.5
Patella	0.6	0.8	0.5	0.9
Tibia	1.2	2.1	1.3	1.7
Metatarsus	1.8	2.3	2.0	2.6
Tarsus	1.4	2.4	1.5	1.7
Total length	6.9	10.7	7.7	9.8

Palpus with the trochanter 0.3 mm. long, femur 0.9, patella 0.5, tibia 0.9, and tarsus 0.4. Total length 3.0 mm. Palpus characteristi-

cally flattened. A projection extending on either side of the trochanter. A ventral row of teeth on the femur.

Chelicerae normal, proximal segment slightly enlarged.

Dorsum reddish brown, with darker brown mottlings on the lateral area and free tergites. A lighter brown region bordering a darker median brown area. Spines of the third area lighter in color.

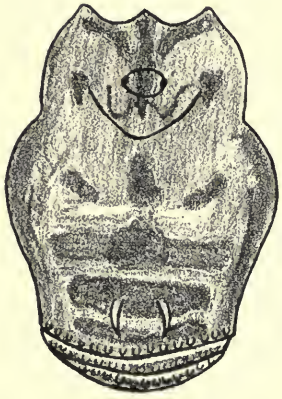

FIG. 7. *Bokwina sandersoni*. Dorsal view of female.

Venter and coxae reddish brown, trochanters light reddish brown, remainder of legs darker brown with lighter punctations. Chelicerae and palpi reddish brown with darker mottlings.

Total length of body 3.2 mm., cephalothorax 1.1, width of body at widest portion 2.4.

Description of female.—Similar in appearance to male, but lacking the enlarged basitarsus of the first tarsus.

Total length of body 3.2 mm., cephalothorax 1.2, width of body at widest portion 2.4.

Cynorta hondurensis sp. nov. Figure 8.

Type from Lake Ticamaya, east of San Pedro, Honduras. In the collection of Chicago Natural History Museum. Male. Collected April 11, 1923, by Karl P. Schmidt.

Description of male.—Dorsum finely granulate, a pair of small tubercles on the first area and a pair of short spines on the third. Fifth area and free tergites with a transverse row of small tubercles. Venter and coxae finely granulate, clothed throughout with scattered hairs. A transverse row of small tubercles across each free sternite. Scattered tubercles on the genital operculum. A transverse row of

larger tubercles across coxae I; a few lateral teeth on the anterior and posterior margins of coxae III; coxae IV with a dorsal distal spine.

Legs clothed throughout with scattered hairs. A few tuberculations on the femora. A few somewhat larger tuberculations on the distal portion of the fourth femora. Tarsal segments 6–11–7–8. Distitarsus of first tarsus with three segments, of second with three segments. Basitarsus of first tarsus somewhat enlarged.

LENGTH OF LEGS

	I	II	III	IV
	mm.	mm.	mm.	mm.
Trochanter	0.4	0.5	0.6	0.8
Femur	2.5	4.2	3.6	4.5
Patella	1.0	1.1	1.2	1.2
Tibia	1.5	3.6	2.2	3.2
Metatarsus	2.7	4.1	3.2	4.5
Tarsus	2.2	3.4	2.2	2.7
Total length	10.3	16.9	13.0	16.9

Palpus with the trochanter 0.6 mm. long, femur 1.2, patella 0.7, tibia 1.3, and tarsus 0.7. Total length 4.5 mm. Palpus characteristically flattened with a ventral spine on the trochanter and a ventral row of teeth on the femur.

Chelicerae normal. Proximal segment slightly enlarged.

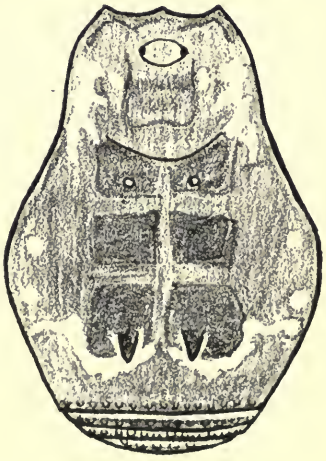

FIG. 8. *Cynorta hondurensis*. Dorsal view of male.

Dorsum reddish brown, areas and median line outlined with lighter brown, free tergites and spines darker brown. A transverse bowed white line just posterior to the spines. Tubercles of the first area white. An irregular white spot on either side at the lateral por-

tion of the first area and the posterior half of the cephalothorax. A few white spots along the lateral margin. Venter, coxae, and appendages reddish brown.

Total length of body 6.1 mm., cephalothorax 1.8, width of body at widest portion 4.8.

Remarks.—This species is most closely related to *C. dariensis* Roewer. However, the dorsal color pattern differs markedly, the tubercles are white, and small tubercles are present on the free tergites and sternites.

Cynorta intrica sp. nov. Figure 9.

Type from San José del Avila, Caracas, Venezuela. In the collection of Chicago Natural History Museum. Male. Collected by Padre Cornelio Vogl.

Paratype.—A male, same data as the type. Deposited in the collection of the American Museum of Natural History.

Description of male.—Dorsum finely granulate, a pair of tubercles on the first area and a pair of blunt, low, heavy spines on the third area. Venter and coxae finely granulate. A transverse row of large tubercles across coxae I. Lateral teeth present on anterior and posterior margins of coxae III. A transverse row of very small tubercles across each free sternite.

Legs clothed throughout with hairs, a few small tuberculations on the femora, these tuberculations forming a larger row on the retrolateral margin of the fourth femur. The distal end of the fourth femur somewhat swollen and rounded retrolaterally. Basitarsus of first tarsus slightly enlarged. Tarsal segments 6–11–7 to 8–7 to 8. Distitarsus of first tarsus with three segments, of second with three segments.

LENGTH OF LEGS

	I	II	III	IV
	mm.	mm.	mm.	mm.
Trochanter	0.4	0.5	0.5	0.6
Femur	2.0	4.5	3.2	4.5
Patella	0.7	1.0	0.9	1.0
Tibia	1.3	3.4	1.7	2.8
Metatarsus	2.0	4.2	2.8	3.8
Tarsus	1.3	2.2	1.9	2.2
Total length	7.7	15.8	21.0	14.9

Palpus with the trochanter 0.3 mm. long, femur 0.9, patella 0.6, tibia 0.9, and tarsus 0.4. Total length 3.1 mm. Palpus characteristically flattened, ventral teeth present on its ventral margin.

Chelicerae slightly enlarged.

Dorsum reddish brown, spines of the third area black. Intricate pattern of white markings on the posterior portion of the cephalothorax and on the abdominal scute. This white series of markings nearly absent from the median portion of the third area, but in the lateral margin of the third area, an extension reaching the edge of

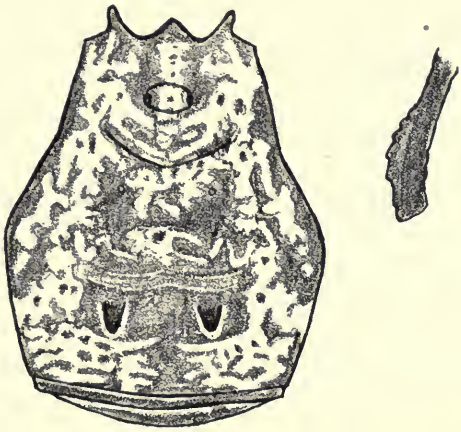

FIG. 9. *Cynorta intrica.* Dorsal view and lateral view of distal portion of femur of fourth leg, both of male.

the dorsal scute. These white markings extending across the eye tubercle in a band. An irregular white spot on either side of each free tergite. Venter and coxae reddish brown. Legs, including trochanters, much lighter, yellowish. Dark brown splotches giving a rough annulate appearance on all segments but the tarsus. Chelicerae and palpi reddish brown with darker mottlings.

Total length of body 3.5 mm., cephalothorax 1.4, width of body at widest portion 3.0.

Remarks.—This species differs from other species of the genus *Cynorta* in the dorsal color pattern and in the distinctive enlargement of the distal portion of the fourth femur.

Cynorta bromeliacia sp. nov. Figure 10.

Type from mountain camp, 4,500 feet, west of San Pedro Sula, Honduras. In the collection of Chicago Natural History Museum. Male. Collected from bromeliads April 1, 1923, by Karl P. Schmidt and L. L. Walters.

Paratypes.—Twenty males and females, same data as type. Five deposited in the collection of the American Museum of Natural History.

Description of male.—Dorsum finely granulate, a pair of tubercles on the first area, a pair of sharp spines on the third. Remaining areas and free tergites without median armature. Lateral portion

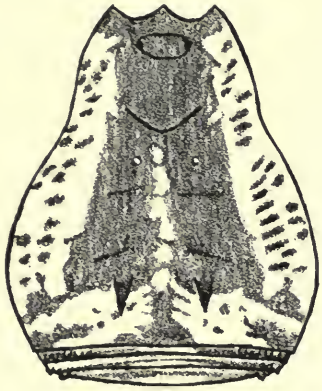

FIG. 10. *Cynorta bromeliacia*. Dorsal view of male.

of each free tergite with several small tubercles. Venter and coxae finely granulate, with scattered hairs. A transverse row of tubercles across surface of coxae I. A few lateral teeth present on anterior and posterior margins of coxae III. A transverse row of very small tubercles across each free sternite.

Legs clothed throughout with scattered hairs. A distal posterior tubercle on third and fourth trochanters. Tubercles present on third and fourth femora, patellae, and tibiae. Distal portion of fourth femur somewhat widened, with a row of ten or twelve larger tubercles on either side. Tarsal segments 6–15–10–12. Distitarsus of first tarsus with three segments, of second with three. Basitarsus of first tarsus slightly enlarged.

LENGTH OF LEGS

	I mm.	II mm.	III mm.	IV mm.
Trochanter	0.4	0.6	0.6	0.8
Femur	3.5	9.0	5.6	7.8
Patella	1.0	1.3	1.3	1.5
Tibia	2.1	6.7	2.7	4.2
Metatarsus	3.4	9.2	5.0	7.4
Tarsus	2.1	4.7	2.1	3.7
Total length	12.5	31.5	17.3	25.4

Palpus with the trochanter 0.7 mm. long, femur 1.2, patella 0.7, tibia 1.2, and tarsus 0.7. Total length 4.5 mm. Palpus characteristically flattened. A row of teeth present on the ventral margin of the femur.

Chelicerae normal, tubercles on the proximal portion.

Dorsum reddish brown, spines of the third area darker brown. Tubercles of the first area white. In a few specimens, these tubercles not white. On either side, a broad white stripe with numerous brown punctations extending from the anterior margin of the cephalothorax to the median portion of the third area along the lateral edges of the scute. Posterior to the spines a similar broad marking extending to the posterior margin of the scutes. A broken median white line extending from the cephalothorax to the posterior stripe. In a few specimens, a pair of white dots just anterior to the pair of spines. Second and third free tergites with median white markings of varying size. Venter, coxae, and appendages reddish brown.

Total length of body 5.3 mm., cephalothorax 1.8, width of body at widest portion 3.8.

Description of female.—Similar in appearance to the male but lacking the enlarged basitarsus and the tubercles at the distal portion of the fourth femur.

Total length of body 5.0 mm., cephalothorax 1.5, width of body at widest portion 4.8.

Remarks.—This species is related to *Cynorta coxalis* Roewer, but the dorsal color pattern is entirely different. Also, this species lacks the tuberculate coxae and the spine on the proximal portion of the fourth femur of *Cynorta coxalis.*

Cynorta cruzensis sp. nov. Figure 11.

Type from El Fortin, Vera Cruz, Mexico. In the collection of Chicago Natural History Museum. Male. Collected August 12, 1941, by Henry S. Dybas.

Description of male.—Dorsum finely granulate, a pair of tubercles on the first area, a pair of large spines on the third. Free tergites without transverse rows of tubercles. Eye tubercle normal. Venter and coxae finely granulate, with scattered hairs. A transverse row of small hairs across each free sternite; anal operculum with scattered hairs. A transverse row of tubercles across coxae I; a few lateral teeth present on the margins of coxae III; coxae IV with only a dorsal distal tubercle.

Legs long, covered with scattered hairs and a few very small granulations. Femora, patellae, and tibiae of all legs somewhat heavier. Basitarsus of the first leg somewhat enlarged. Tarsal

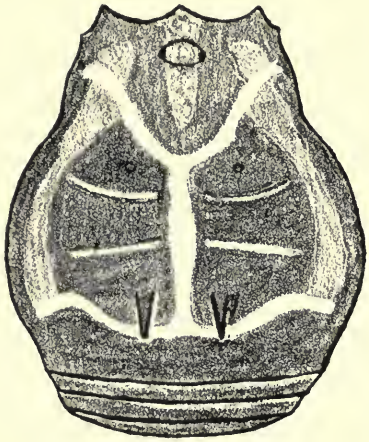

FIG. 11. *Cynorta cruzensis*. Dorsal view of male.

segments 6–15–8–10. Distitarsus of first tarsus with three segments, of second with three segments.

LENGTH OF LEGS

	I	II	III	IV
	mm.	mm.	mm.	mm.
Trochanter	0.6	0.8	0.9	0.9
Femur	4.6	9.9	7.2	11.1
Patella	1.1	1.5	1.4	1.8
Tibia	2.9	7.5	3.7	5.9
Metatarsus	4.8	10.1	7.2	12.1
Tarsus	2.7	5.9	3.6	4.2
Total length	16.7	35.7	24.0	36.0

Palpus with the trochanter 1.2 mm. long, femur 2.0, patella 1.1, tibia 1.8, and tarsus 1.0. Total length 7.1 mm. Palpus characteristically flattened, with a ventral row of teeth on the femur.

Chelicerae slightly enlarged, proximal segment with a few tubercles. Distal segment slightly elevated and thickened.

Dorsum reddish brown with a white V between the cephalothorax and the abdomen, the arms of the V ending in the region of the second trochanter. A median white line extending from the V to the posterior portion of the third area. A curved transverse white line posterior to the spines of the third area. A curved penciled line of white at the posterior margin of the first and second areas. Tubercles of the first area lighter but not white. Spines dark, no white mark-

ings on the free tergites; darker mottlings about the lateral and posterior portion of the abdomen. A triangle of lighter brown dots across the median portion of the cephalothorax, including the eye tubercle. Venter and coxae reddish brown. Appendages reddish brown, with dark brown mottlings.

Total length of body 5.9 mm., cephalothorax 1.9, width of body at widest portion 5.0.

Remarks.—This species is related to *Cynorta skwarrae* Roewer, differing in the length of the legs and the dorsal color pattern.

Cynorta skwarrae Roewer. Figure 12.

Cynorta skwarrae Roewer, Zool. Anz., **95**, p. 247, fig. 1, 1931—Mirador, Vera Cruz.

Mexico: El Fortin, Vera Cruz, August 9, 1941 (Henry S. Dybas).

Description of male.—Dorsum finely granulate, usually a pair of low tubercles on the first area, a pair of small slender spines on the third. These spines are slightly curved posteriad. Remaining areas and free tergites without median armature. A transverse row of very small tubercles across the fifth area and each free tergite. Eye tubercle normal, smooth above. Venter and coxae finely granulate, a transverse row of larger tubercles across coxae I. Lateral teeth present on the anterior and posterior margins of coxae III. A transverse row of small tubercles across each free sternite. Anal operculum with scattered tuberculations. Coxae IV with dorsal distal spine. Third and fourth trochanters with distal posterior spine.

Legs clothed throughout with hairs, a few granulations on the femora. Third and fourth legs not enlarged over the first and second. Basitarsus of first tarsus slightly enlarged. Tarsal segments 6–11–7–8. Distitarsus of first tarsus with three segments, of second with three segments.

LENGTH OF LEGS

	I	II	III	IV
	mm.	mm.	mm.	mm.
Trochanter	0.4	0.4	0.4	0.5
Femur	1.6	3.4	2.2	3.2
Patella	0.6	0.9	0.8	0.8
Tibia	1.3	2.6	1.5	2.0
Metatarsus	1.9	3.2	2.4	3.5
Tarsus	1.4	2.9	1.4	1.8
Total length	7.2	13.4	8.7	11.8

Palpus with the trochanter 0.4 mm. long, femur 1.0, patella 0.5, tibia 1.0, and tarsus 0.7. Total length 3.6 mm. Palpus characteristically flattened, a ventral row of teeth on the femur.

Chelicerae slightly enlarged. Proximal segment with a slight dorsal elevation and a few small tuberculations at the distal portion. Second segment with a slight median dorsal elevation.

Dorsum reddish brown with darker brown mottlings, particularly at the lateral and posterior portions. A transverse white line just

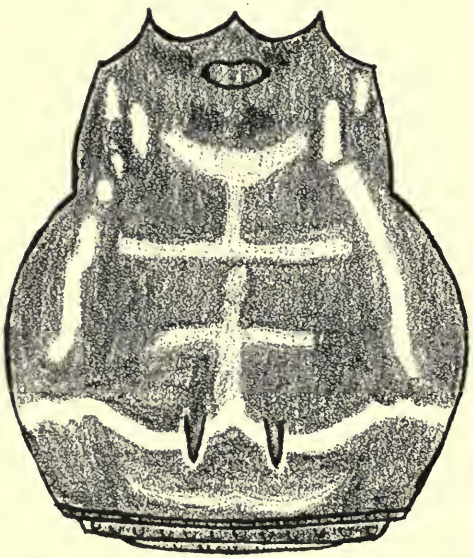

FIG. 12. *Cynorta skwarrae*. Dorsal view of male.

posterior to the spines of the third area, this line slightly curved around the spines. A lateral white line, broken on one side, extends from the anterior part of the third area to the median portion of the cephalothorax. Spines of the third area yellowish. Median line and boundaries of the areas lighter brown, with occasionally a few very small white flecks in these lighter lines. No white V present at the junction of the cephalothorax and the abdomen. Venter and coxae reddish brown, appendages somewhat lighter, but with darker brown mottlings.

Total length of body 3.4 mm., cephalothorax 1.1, width of body at widest portion 3.1.

Remarks.—The study of a series of specimens of this species reveals that some specimens lack the small paired tubercles of the first area. The specimen illustrated is one of these.

Cynorta triangulata Goodnight and Goodnight

Cynorta triangulata Goodnight and Goodnight, Amer. Mus. Nov., No. 1163, p. 4, fig. 11, 1942—Mexico (Valles, San Luis Potosí).

Mexico: Tamazunchale, San Luis Potosí, August 17, 1941 (Henry S. Dybas); Valles, San Luis Potosí, August 19, 1941 (Charles H. Seevers).

Erginulus brevispinosus sp. nov. Figure 13.

Type from Hacienda Santa Ana, San Pedro Sula, Honduras. In the collection of Chicago Natural History Museum. Male. Collected March 9, 1923, by Karl P. Schmidt and L. L. Walters.

Paratypes.—Five males and females, same data as the type. Two deposited in the collection of the American Museum.

Description of male.—Dorsum finely granulate, a pair of very small spines present on the third area, remaining areas and free tergites without median armature. A transverse row of very small tubercles across each of the free tergites. Venter and coxae finely granulate. A transverse row of tubercles across coxae I. A few lateral teeth present on the anterior and posterior margins of coxae III. A transverse row of small tubercles across each of the free sternites. Small scattered tubercles on the genital operculum. A dorsal apical small spine on coxae IV.

Legs clothed throughout with scattered hairs. Tuberculations present on the femora, patellae, and tibiae, particularly heavy on

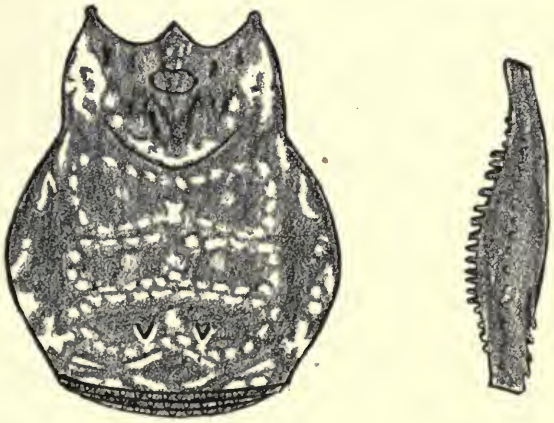

FIG. 13. *Erginulus brevispinosus.* Dorsal view and prolateral view of femur of fourth leg, both of male.

the fourth leg. Fourth femur enlarged, especially at the distal portion, and armed with larger tubercles arranged in rows. Prolaterally, the tuberculations appearing as in figure 13. In addition

to the rows figured, there are two rows of tubercles on the retrolateral surface, one somewhat larger at the distal portion, these rows giving the femur a somewhat angular appearance. There is some variation in the size of these various rows among individuals. Tarsal segments 6–14–7–7. Distitarsus of first tarsus with three segments, of second with three segments. Basitarsus of first tarsus slightly enlarged.

LENGTH OF LEGS

	I	II	III	IV
	mm.	mm.	mm.	mm.
Trochanter	0.5	0.7	0.7	0.7
Femur	2.3	4.8	2.8	4.1
Patella	0.8	1.3	1.2	1.4
Tibia	1.4	3.9	2.0	3.2
Metatarsus	2.2	4.6	3.2	5.0
Tarsus	1.6	3.6	1.7	1.9
Total length	8.8	18.9	11.6	16.3

Palpus with the trochanter 0.7 mm. long, femur 1.6, patella 1.0, tibia 1.8, and tarsus 0.5. Total length 5.6 mm. Palpus characteristically flattened, a ventral row of teeth on the femur.

Chelicerae normal, somewhat enlarged.

Dorsum reddish brown with lighter mottlings. A lighter brown dot present on either side of the first and second areas. Spines of the third area somewhat lighter. A broken median white line extending through the first three areas. Irregular white markings along the lateral margin of the scute from the median portion of the cephalothorax to the fourth area. A light irregular white penciling present in the median portion at the junction of the cephalothorax and the abdomen. Median portion of the first four areas encircled with a ring of white dots, an irregular white broken line on the fifth area. Free tergites without white markings. Venter, coxae, and appendages reddish brown.

Total length of body 5.4 mm., cephalothorax 1.9, width of body at widest portion 4.4.

Description of female.—Similar to male, but with the chelicerae somewhat reduced. The fourth femur only very slightly enlarged and without the large tuberculations. The first basitarsus not enlarged, and the spines of the third area reduced to tubercles.

Total length of body 4.7 mm., cephalothorax 1.7, width of body at widest portion 4.2.

Remarks.—E. brevispinosus is related to *E. albipunctata* Cambridge. The dorsal color pattern and the tuberculations of the fourth leg differ, however.

Erginulus clavipes Cambridge

Erginus clavipes Cambridge, Biol. Centr.-Amer., Arach., 2, pt. 6, p. 566, pl. 53, figs. 8, 8a, 1904—Guatemala (Cubrilquitz).

Guatemala: Bobos, Izabal, December 20, 1933 (Karl P. Schmidt); Samac, Alta Vera Paz (Karl P. Schmidt); Volcan Tajumulco, February 16, 1934 (Karl P. Schmidt).

Erginulus pectiginerus Cambridge

Erginus pectiginerus Cambridge, Biol. Centr.-Amer., Arach., 2, pt. 6, p. 567, pl. 53, figs. 11, 11a, 11b, 1904—Guatemala (Guatemala City, Tactic, Cunen, and Cahabon).

Honduras: Hacienda Santa Ana, San Pedro Sula, March 9, 1923 (Karl P. Schmidt).

Erginulus serratofemoralis sp. nov. Figure 14.

Type from Silkgrass, British Honduras. Temporarily deposited in the collection of Chicago Natural History Museum. Male. Collected November 23, 1939, by Ivan T. Sanderson.

Paratypes.—Ten males and females. From Silkgrass, British Honduras, November 17, 1939; Double Falls, British Honduras, December 17, 1939; and Bokowina, British Honduras, November 11 and 23, 1939, and October 19 and 29, 1939. Collected by Ivan T. Sanderson. Deposited temporarily in the collection of Chicago Natural History Museum.

Description of male.—Dorsum finely granulate, with a pair of small spines on the third area. Remaining areas and free tergites unbedecked except for a transverse row of very small hair-tipped tubercles across each free tergite and the fifth area. Eye tubercle normal. Venter and coxae granulate, with scattered hairs, a few lateral teeth present on anterior and posterior margins of coxae III. A transverse row of very small tubercles across each free sternite. Anal operculum covered with small tubercles.

Legs clothed with hairs, with tuberculations on femora, patellae, and tibiae. These tubercles somewhat larger on the anterior distal portion of the third femur. Third femur with a row of low spines on the ventral margin. Each trochanter with a distal posterior tubercle, which is spinose on the third and fourth. Fourth femur with a ventral row of twelve to fourteen spines; dorsally, numerous enlarged tubercles, forming a row of larger tubercles at proximal portion. Tarsal segments 6–14–8–8 to 9. Distitarsus of first tarsus with three segments, of second with three segments. Basitarsus of first and second tarsi slightly enlarged.

	Length of Legs			
	I	II	III	IV
	mm.	mm.	mm.	mm.
Trochanter	0.6	0.6	0.6	0.8
Femur	2.7	4.5	3.2	4.2
Patella	0.9	1.2	1.0	1.1
Tibia	1.6	3.6	2.0	2.9
Metatarsus	3.1	5.0	3.5	5.0
Tarsus	1.8	3.6	1.9	2.3
Total length	10.7	18.5	12.2	16.3

Palpus with the trochanter 1.0 mm. long, femur 1.7, patella 1.0, tibia 1.1, and tarsus 0.5. Total length 5.3 mm. Palpus characteristi-

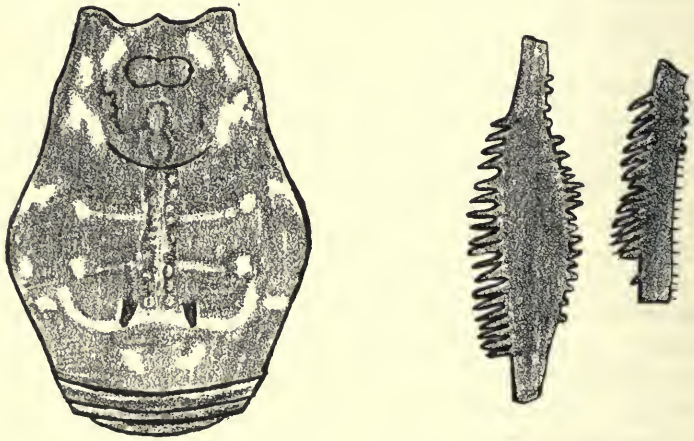

Fig. 14. *Erginulus serratofemoralis.* Dorsal view and prolateral views of femur of fourth leg of paratype (left) and type (right), all of male.

cally flattened, a ventral row of teeth present on the femur and a less definite row on the tibia.

Chelicerae enlarged, both segments somewhat elevated.

Dorsum reddish brown, spines of the third area dark at the base. Lighter brown separating the areas and marking the median line. A mottled strip of darker and lighter brown on either side of the light median line. The posterior lateral portion of the cephalothorax with an irregular white marking. A bowed white line present at the posterior portion of the third area. A few white dots irregularly scattered over the dorsum; however, markings on the free tergites and the white V are lacking. Venter and coxae concolorous with the dorsum, free sternites somewhat darker. Appendages concolorous with the dorsum, with a few darker mottlings on the legs.

Total length of body 6.1 mm., cephalothorax 2.1, width of body at widest portion 4.8.

Description of female.—Similar to male, but with reduced chelicerae and lacking the spines on the fourth leg.

Total length of body 6.1 mm., cephalothorax 2.1, width of body at widest portion 4.5.

Remarks.—This species is related to *E. pulchrus* Goodnight and Goodnight, but differs in the dorsal color pattern and the spination of the femur of the fourth leg.

A second male differs somewhat in the dorsal color pattern from the male holotype. It lacks the scattered white dots and has the white of the cephalothorax much reduced. In the dorsal median portion of the fourth femur, there is a row containing from thirteen to fifteen small spines.

Eucynorta schmidti sp. nov. Figure 15.

Type from Escobas, Isabal, Guatemala. In the collection of Chicago Natural History Museum. Male. Collected November 27, 1933, by Karl P. Schmidt and F. J. W. Schmidt.

Description of male.—Dorsum finely granulate, a pair of acute spines present on the third area. Remaining areas and free tergites without median armature. A transverse row of small tubercles across the fifth area and each free tergite. Venter and coxae finely granulate. A transverse row of tubercles across coxae I. Coxae III with a dorsal apical spine. Scattered hairs on the free sternites and anal operculum.

Legs clothed throughout with hairs. A few small tubercles on the femora. Tarsal segments 6–12–7–7. Distitarsus of first tarsus with three segments, of second with three segments. Basitarsus of first tarsus slightly enlarged.

LENGTH OF LEGS

	I	II	III	IV
	mm.	mm.	mm.	mm.
Trochanter	0.3	0.3	0.4	0.4
Femur	1.4	2.9	2.1	3.0
Patella	0.4	0.8	0.5	0.9
Tibia	1.1	2.1	1.1	1.9
Metatarsus	1.6	2.7	2.1	2.9
Tarsus	1.4	2.7	1.5	1.8
Total length	6.2	11.5	7.7	10.9

Palpus with the trochanter 0.3 mm. long, femur 0.7, patella 0.3, tibia 0.8, and tarsus 0.3. Total length 2.4 mm. Palpus characteristi-

cally flattened. A ventral row of teeth present on the femora. Palpus clothed throughout with hairs.

Chelicerae slightly enlarged.

Dorsum light reddish brown with slightly darker mottlings around the margins of the scutes and on the free tergites. A curved lighter area present just posterior to the eye tubercle. Median line

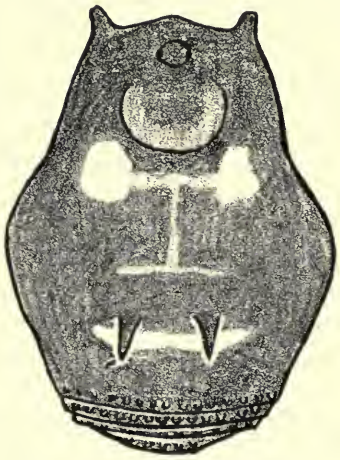

FIG. 15. *Eucynorta schmidti*. Dorsal view of male.

and area divisions slightly lighter. A large white spot on either side of the first area and the anterior portion of the second area. A median thick white line present just posterior to the spines of the third area. Spines, venter, coxae, and appendages reddish brown, concolorous with the dorsum.

Total length of body 3.0 mm., cephalothorax 1.4, width of body at widest portion 2.3.

Remarks.—This species is related to *E. bipunctata* Cambridge; however, it is much smaller and has a different dorsal color pattern.

Eucynortoides nigrispinulata sp. nov. Figure 16.

Type from San José del Avila, Caracas, Venezuela. In the collection of Chicago Natural History Museum. Male. Collected by Padre Cornelio Vogl.

Paratypes.—Three males and females, same data as the type. Two deposited in the collection of the American Museum of Natural History.

Description of male.—Dorsum finely granulate, a median pair of low tubercles on the first area and another smaller tubercle

laterad on either side. Third area with a pair of low spines; fourth area with a pair of tubercles; second and fifth areas and free tergites without median armature; fifth area and free tergites with a transverse row of tubercles, these tubercles quite large, projecting on the third free tergite. Eye tubercle normal. Venter and coxae granulate, with scattered hairs. A transverse row of tuberculations across

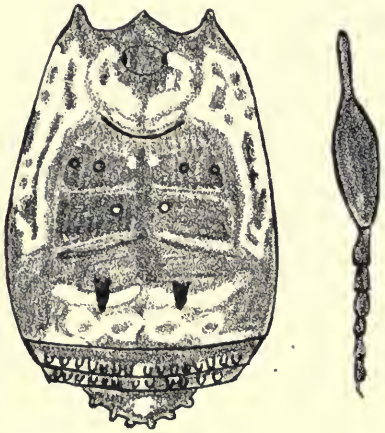

FIG. 16. *Eucynortoides nigrispinulata.* Dorsal view and lateral view of metatarsus and tarsus of first leg, both of male.

each free sternite. Anal operculum with a few scattered tubercles. Coxae I with a transverse row of larger tubercles; coxae III with anterior and posterior rows of lateral teeth.

Legs clothed throughout with hairs, third and fourth legs with basal segments not enlarged over first and second. Distal two-thirds of the first metatarsus enlarged. Femora, patellae, and tibiae with small tuberculations. Tarsal segments 6–10 to 14–7–8. Distitarsus of first tarsus with three segments, of second with three segments. Basitarsus of first tarsus slightly enlarged.

LENGTH OF LEGS

	I	II	III	IV
	mm.	mm.	mm.	mm.
Trochanter	0.4	0.5	0.5	0.6
Femur	2.2	4.9	3.4	4.9
Patella	0.7	1.1	1.0	1.0
Tibia	1.4	3.8	2.2	2.8
Metatarsus	2.0	4.2	3.0	4.8
Tarsus	1.5	3.2	1.9	2.2
Total length	8.2	17.7	12.0	16.3

Palpus with the trochanter 0.4 mm. long, femur 1.0, patella 0.6, tibia 1.0, and tarsus 0.6. Total length 3.6 mm. Palpus characteristically flattened, with ventral teeth on the femur.

Chelicerae very slightly enlarged.

Dorsum reddish brown with darker brown mottlings, particularly on the cephalothorax. Spines of the third area black. A reticulate white marking at the lateral margin of the dorsal scute and extending from the region of the second trochanter to the posterior part of the third area. A pair of white dots posterior to the eye tubercle. No white V. Several white dots in the median line of each of the first three areas, varying from a pair in each area to several. Posterior to the spines of the third area a pair of curved white lines. On the fourth area a double white line, the ends curving around and enclosing each reddish brown tubercle. Fifth area and free tergites each with a median white spot and a lateral spot on either side. Venter and coxae reddish brown. Legs yellowish with black markings, giving a somewhat annulate appearance. Enlarged portion of the first metatarsus reddish brown. Chelicerae and palpus reddish brown, with darker brown markings.

Total length of body 4.1 mm., cephalothorax 1.4, width of body at widest portion 3.0.

Description of female.—Similar in appearance to male, but the tubercles of the fourth area are reduced in size and the first metatarsus is longer and not enlarged.

Total length of body 6.0 mm., cephalothorax 1.4, width of body at widest portion 3.6.

Remarks.—*E. nigrispinulata* differs from other species of the genus *Eucynortoides* in its distinctive dorsal color pattern.

Eucynortoides maculata Roewer

Eucynortoides maculata Roewer, Archiv Naturg., 78, (Abt. A), pt. 10, p. 64, pl. 2, fig. 19, 1912—Mexico (Puebla).

Mexico: El Fortin, Vera Cruz, August 12, 1941 (Henry S. Dybas).

Eucynortula multilineata sp. nov. Figure 17.

Type from Silkgrass, British Honduras. Temporarily deposited in the collection of Chicago Natural History Museum. Female. Collected December 5, 1939, by Ivan T. Sanderson.

Description of female.—Dorsum finely granulate, a pair of low tubercles on the third area, the remaining areas and the free tergites

unbedecked. Free tergites without transverse rows of tubercles. Coxae and venter with a few scattered hairs. Sternites without tubercles, a few lateral teeth present on anterior and posterior margins of coxae III and a transverse row of tubercles on coxae I.

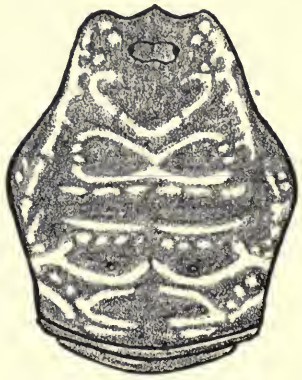

FIG. 17. *Eucynortula multilineata*. Dorsal view of female.

Legs with scattered hairs, a few very small tuberculations present on the femora. Tarsal segments 6–14–8–9. Distitarsus of first tarsus with three segments, of second with three segments.

LENGTH OF LEGS

	I	II	III	IV
	mm.	mm.	mm.	mm.
Trochanter	0.4	0.6	0.6	0.6
Femur	3.2	8.0	4.7	6.2
Patella	0.9	1.3	1.2	1.4
Tibia	1.8	5.7	2.7	3.8
Metatarsus	3.0	6.5	4.1	6.8
Tarsus	2.0	4.2	2.2	2.9
Total length	11.3	26.3	15.5	21.7

Palpus with the trochanter 0.5 mm. long, femur 1.3, patella 0.6, tibia 1.4, and tarsus 0.5. Total length 4.3 mm. Palpus characteristically flattened, a ventral row of teeth on the femur.

Chelicerae normal, with a row of several large tubercles at the proximal portion of the first segment.

Dorsum reddish brown, with a darker brown patch surrounding the tubercles and some darker brown on the first area. A series of narrow white lines present as follows: a V at the junction of the cephalothorax and the abdomen, an irregular line along the lateral margin, curved lines outlining the median portions of the first four areas, and a complete transverse line at the posterior portion of the third and fourth areas. Other scattered irregular lines as in figure 17.

Venter, coxae, palpi, and chelicerae reddish brown. Legs yellowish with black markings, which give an annulate appearance particularly on the metatarsi.

Total length of body 5.0 mm., cephalothorax 1.8, width of body at widest portion 4.2.

Remarks.—E. multilineata is related to *E. bituberculata* Cambridge, but the dorsal color pattern is entirely different.

Euerginus rectus Cambridge

Erginus rectus Cambridge, Biol. Centr.-Amer., Arach., 2, pt. 6, p. 567, pl. 53, figs. 10, 10a, 1904—Guatemala (Petet, San Juan Chamelco).

Guatemala: Samac, Alta Vera Paz (Karl P. Schmidt); Coban, March 18, 1934 (Karl P. Schmidt).

Tajumulcia gen. nov.

Genotype *Tajumulcia plana* sp. nov.

Diagnosis.—Paired tubercles present on the first, third, and fourth areas, second and fifth areas and free tergites without median armature. Tarsal segments 5–more than 6–6–6. Distitarsus of first tarsus with three segments, of second with three segments. Basal segments of third and fourth legs not enlarged over those of first and second.

Remarks.—Tajumulcia is related to *Libitiodes* Roewer; however, it has tubercles rather than spines on the third area.

Tajumulcia plana sp. nov. Figure 18.

Type from Tajumulco, Guatemala. In the collection of Chicago Natural History Museum. Male. Collected in 1934 by Karl P. Schmidt.

Paratype.—One male, same data as the type. Deposited in the collection of the American Museum of Natural History.

Description of male.—Dorsum finely granulate, a pair of large tubercles present on the third area, a pair of somewhat smaller ones on the fourth, and a pair of very small ones on the first. A transverse row of tubercles across the fifth area and each free tergite. Venter and coxae finely granulate, with scattered hairs. A transverse row of tubercles across the first coxae, a few lateral teeth present on anterior and posterior margins of coxae III. A transverse row of tubercles across each of the free sternites and a few scattered tubercles on the anal operculum.

Legs clothed throughout with hairs; a few tubercles present on femora, patellae, and tibiae of all legs. Tubercles somewhat larger on the patellae. Third and fourth femora curved. Tarsal segments 5–8–6–6. Distitarsus of first tarsus with three segments, of second with three segments.

LENGTH OF LEGS

	I	II	III	IV
	mm.	mm.	mm.	mm.
Trochanter	0.4	0.4	0.5	0.5
Femur	1.6	2.5	2.2	2.6
Patella	0.6	0.9	0.8	0.9
Tibia	1.3	2.1	1.8	2.2
Metatarsus	1.8	1.9	2.2	3.2
Tarsus	1.4	2.2	1.4	1.6
Total length	7.1	10.0	8.9	11.0

Palpus with the trochanter 0.5 mm. long, femur 1.1, patella 0.6, tibia 0.8, and tarsus 0.7. Total length 3.7 mm. Palpus characteristically flattened, with scattered hairs. Granulate throughout. A ventral row of teeth on the femur.

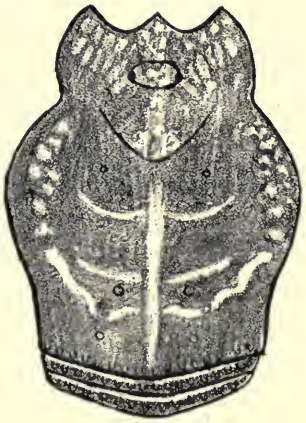

FIG. 18. *Tajumulcia plana*. Dorsal view of male.

Chelicerae somewhat enlarged, the proximal segment rather tuberculate.

Dorsum reddish brown with darker and lighter mottlings. Areas vaguely outlined with lighter marks, with darker mottlings along the lateral margins and on the free tergites. In the holotype, there is a small line of white penciling just posterior to the tubercles of the third area. This is lacking in the paratype. Venter, coxae, and appendages concolorous with the dorsum.

Total length of body 4.6 mm., cephalothorax 1.6, width of body at widest portion 3.6.

Metavonones hispidus Cambridge

Metavonones hispidus Cambridge, Biol. Centr.-Amer., Arach., 2, pt. 6, p. 553, pl. 52, figs. 6, 6a, 6b, 1904—Mexico (Amula, Guerrero).

Mexico: Tehuacan, Puebla, July 6, 1941 (Henry S. Dybas); Orizaba, Vera Cruz, July 9, 1941 (Henry S. Dybas and Charles H. Seevers).

Ornotus pelaezi Goodnight and Goodnight

Ornotus pelaezi Goodnight and Goodnight, Amer. Mus. Nov., No. 1211, p. 6, fig. 19, 1942—Mexico (Orizaba, Vera Cruz).

Mexico: State of Vera Cruz, 1941 (Henry S. Dybas).

Family **Gonyleptidae** Sundevall

Subfamily **Cranainae** Roewer

Panalus gen. nov.

Genotype *Panalus robustus* sp. nov.

Diagnosis.—Dorsal scute with four distinct areas, median line present on the first area. First and third areas with median paired spines. Third free tergite with a median pair of spines. Remaining areas and free tergites without median armature. Eye tubercle with a pair of spines. Fourth coxae not widened laterally. Femur of palpus without dorsal apical or median apical spine. All tarsal segments numbering more than six. Distitarsus of first tarsus with three segments, of second with three segments. Paired claws simple.

Remarks.—This genus is related to *Nedellinia* Mello-Leitão, but lacks the spines on the second free tergite.

Panalus robustus sp. nov. Figure 19.

Type from mountains west of Cali, Department of Cauca, Colombia. In the collection of Chicago Natural History Museum. Female. Collected June 30, 1938, by Henry S. Dybas.

Paratype.—Same data as the type. Collected by Charles H. Seevers. Deposited in the American Museum of Natural History.

Description of female.—Dorsum with four distinct areas. First area with a median line and with a median pair of spines, around the base of which are small tubercles. Second area with four very small tubercles on either side. Third area with a pair of large robust spines, around the bases of which are numerous tubercles. Fourth area and first and second free tergites with a transverse row of very

small tubercles. Numerous small tuberculations at the lateral portion of the third and fourth areas. Third free tergite with a median pair of spines and a transverse row of small tubercles. Anal operculum unbedecked except for a few small hairs and granulations. Lateral margin of the dorsal scute, in the region of the second and

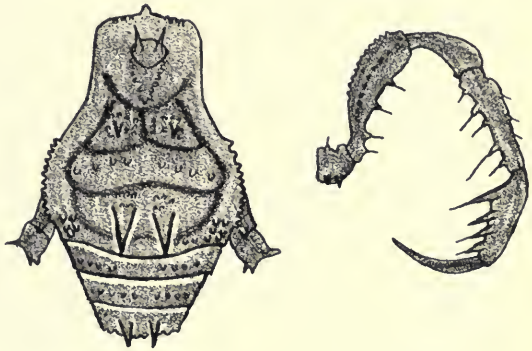

FIG. 19. *Panalus robustus*. Dorsal view of male and retrolateral view of palpus of female.

third areas, with a row of small tuberculations. Eye tubercle normal, with an acute spine over each eye. Bases of these spines with small tuberculations, which continue in a row in front of the spines and posterior to the spines roughly in the form of a V. Three small spinules on either side of the anterior lateral margin of the cephalothorax and a single larger projection in the median anterior portion. Venter and coxae granulate, with a few scattered hairs. A few lateral teeth at the distal posterior margins of second and third coxae; a sharp spine present distally on the fourth coxae.

Third and fourth trochanters of the legs with a distal posterior pointing spine; first and second trochanters with a single anteriorly directed spine, scattered tuberculations present. Femora and patellae of all legs with numerous granulations, unarmed prolaterally. All segments of legs clothed with scattered hairs. Tarsal segments 7–13–7–7. Distitarsus of first tarsus with three segments, of second with three segments.

LENGTH OF LEGS

	I	II	III	IV
	mm.	mm.	mm.	mm.
Trochanter	0.4	0.9	0.6	1.1
Femur	4.1	9.1	6.8	10.8
Patella	0.9	1.4	1.4	1.5
Tibia	2.2	2.2	3.7	4.5
Metatarsus	4.1	4.1	5.9	8.2
Tarsus	2.0	2.0	2.8	3.4
Total length	13.7	19.7	21.2	29.5

Palpus with the trochanter 0.9 mm. long, femur 2.2, patella 1.0, tibia 1.4, and tarsus 1.4. Total length 6.9 mm. Trochanter of the palpus with two small hair-tipped spines ventrad and a single spine dorsad. Femur with a row of four or five small spines ventrad. A row of tuberculations on the retrolateral margin, a few granulations dorsad. Patella unarmed. Tibia and tarsus with two large and two small hair-tipped tubercles on either side. Tarsal claw long and curved.

Chelicerae normal, armed with scattered hairs and numerous tuberculations.

Dorsum reddish brown, with darker brown mottlings in the form of small irregular pencilings. Venter and appendages reddish brown, darker brown markings on the appendages. Darker markings very numerous on the palpus and the proximal segments of the legs.

Total length of body 7.8 mm., cephalothorax 2.2, width of body at widest portion 5.1.

Rhopalocranaus dybasi sp. nov. Figure 20.

Type from mountains west of Cali, Department of Cauca, Colombia. In the collection of Chicago Natural History Museum. Female. Collected June 30, 1938, by Henry S. Dybas.

Description of female.—Dorsum finely granulate, a pair of tubercles present on the first area. A pair of large spines on the third area. First free tergite with a median pair of tubercles. Second and third free tergites with a median pair of spines. Dorsal scute with numerous irregularly scattered white tuberculations. Fourth area and free tergites with transverse rows of very small tubercles, these tubercles somewhat larger on the third free tergite. A lateral row of white tubercles extending from the median portion of the cephalothorax to the posterior portion of the third area. Cephalothorax with three or four small spinules at the anterior lateral margin. Eye tubercle with a pair of small spines. Cephalothorax with irregularly scattered small white tubercles, numerous on the posterior part of the eye tubercle and lacking on the anterior median portion of the cephalothorax. Venter and coxae with scattered hairs. Coxae with numerous granulations and larger tuberculations. A transverse row of tubercles across each free sternite and scattered tubercles on the genital operculum. Dorsal distal portion of coxae IV with a spine.

Legs clothed throughout with hairs. Femora, patellae, and tibiae tuberculate. Four or five small spines on each trochanter. A larger dorsal spine on the fourth trochanter. Third femur with

a proximal spine on the retrolateral surface and one dorsal distal spine. Fourth femur with four or five spinules in the median portion of the retrolateral margin; a larger distal spine, and a row of somewhat larger tubercles on the prolateral margin. Tarsal segments

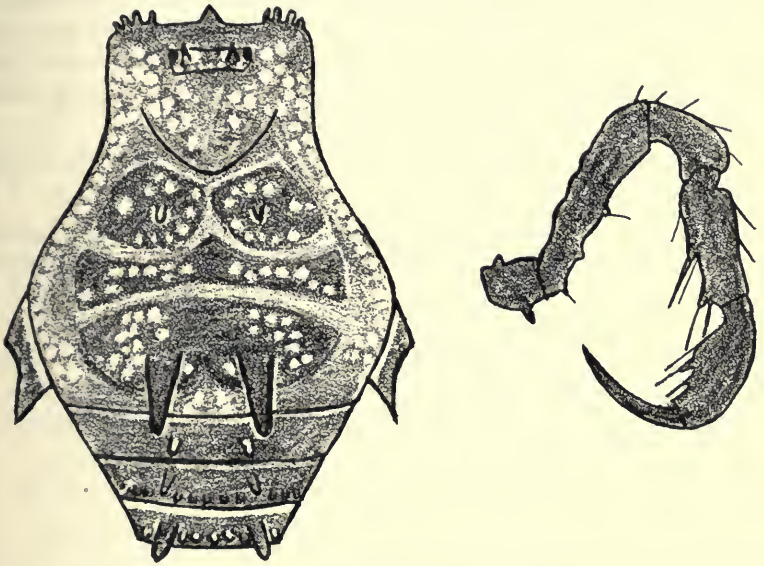

FIG. 20. *Rhopalocranaus dybasi*. Dorsal view and retrolateral view of palpus, both of female.

6–11–7–7. Distitarsus of first tarsus with three segments, of second with three segments.

LENGTH OF LEGS

	I	II	III	IV
	mm.	mm.	mm.	mm.
Trochanter	0.6	0.9	1.1	1.3
Femur	3.9	7.4	5.8	7.2
Patella	1.1	1.6	1.5	1.6
Tibia	2.5	5.0	3.3	4.6
Metatarsus	3.7	6.4	5.0	7.5
Tarsus	2.0	4.7	2.1	2.8
Total length	13.8	26.0	18.8	25.0

Palpus with the trochanter 0.7 mm. long, femur 1.5, patella 0.9, tibia 1.0, and tarsus 1.3. Total length 5.4 mm. Palpus armed retrolaterally, as in figure 20. Prolaterally, femur and patella unarmed, tibia with four spinules and tarsus also with four.

Chelicerae normal.

Dorsum reddish brown, spines of the third area slightly darker. Median portion of areas somewhat darker brown; darker brown mottlings on the cephalothorax. Scattered tubercles of scute, lateral row of tubercles, and transverse row of tubercles on the third free tergite, white; tubercles of other areas and median paired spines, light but not white. Anal operculum reddish brown without any white markings. Venter, coxae, and legs reddish brown. A few small white tubercles on the lateral portion of the fourth coxae. Palpi and chelicerae lighter, reddish brown.

Total length of body 9.3 mm., cephalothorax 2.7, width of body at widest portion 6.5.

Remarks.—*R. dybasi* is related to *R. aspersus* Roewer; however, it has a lateral row of white tuberculations, which *R. aspersus* lacks.

Subfamily **Caelopyginae** Roewer

Metarhrodes circumscriptus Roewer

Metarhrodes circumscriptus Roewer, Abh. Naturw. Ver. Bremen, **28**, p. 130, fig. 11, 1932—Brazil (Therezopolis).

Brazil: Therezopolis, July 9, 1926 (Karl P. Schmidt).

Metarhrodes triangularis Roewer

Metarhrodes triangularis Roewer, Abh. Naturw. Ver. Bremen, **28**, p. 132, fig. 12, 1932—Brazil (Therezopolis).

Brazil: Therezopolis, July 9, 1926 (Karl P. Schmidt).

Subfamily **Gonyleptinae** Simon

Gonyleptellus multimaculatus Roewer

Gonyleptellus multimaculatus Roewer, Abh. Naturw. Ver. Bremen, **27**, p. 428, pl. 7, fig. 4, 1930—Brazil (Therezopolis and Tijuca).

Brazil: Therezopolis, July 9, 1926 (Karl P. Schmidt).

Suborder **Palpatores** Thorell

Family **Phalangiidae** Simon

Subfamily **Leiobuninae** Banks

Leiobunum dromedarium Cambridge

Leiobunum dromedarium Cambridge, Biol. Centr.-Amer., Arach., **2**, pt. 6, p. 583, pl. 54, figs. 19, 20, 1904—Mexico (Teapa).

British Honduras: Kate's Lagoon, February 27, 1940 (Ivan T. Sanderson).

Leiobunum potosum Goodnight and Goodnight

Leiobunum potosum Goodnight and Goodnight, Amer. Mus. Nov., No. 1211, p. 9, fig. 21, 1942—Mexico (Ciudad del Maiz, San Luis Potosí).

Mexico: Tehuacan, Puebla, July 6, 1941 (Henry S. Dybas); Cacaloapan, Puebla, July 5, 1941 (Henry S. Dybas and Charles H. Seevers); Tamazunchale, San Luis Potosí, June 19, 1941 (Henry S. Dybas).

Guatemala: Rio Frio, near Tactic, March 26, 1934 (Karl P. Schmidt).

Description of male.—Similar in appearance to female, but much darker; the median dark stripe very dark brown and the lateral portion of the dorsum darker, with not many of the white punctations showing through. Coxae dark brown, not light as in the female. Trochanters concolorous with the coxae. Legs slender and dark; some dark brown mottlings on the dorsal portion of the palpi.

Length of femora of legs: I, 6.7 mm.; II, 9.5 mm.; III, 6.6 mm.; IV, 9.0 mm.

Palpus with the trochanter 0.3 mm. long, femur 0.9, patella 0.5, tibia 0.7, and tarsus 1.0. Total length 3.4 mm.

Total length of body 3.9 mm., cephalothorax 0.9, width of body at widest portion 2.0.

Remarks.—Only a female was known at the time of the original description of this species.

Leiobunum nycticorpum Goodnight and Goodnight

Leiobunum nycticorpum Goodnight and Goodnight, Amer. Mus. Nov., No. 1163, p. 12, figs. 23, 24, 1942—Mexico (Nueva Morelos, Tamaulipas).

Mexico: Jacala, Hidalgo, June 24, 1941 (Charles H. Seevers).

Leiobunum veracruzensis sp. nov. Figure 21.

Type from El Fortin, Vera Cruz, Mexico. In the collection of Chicago Natural History Museum. Female. Collected August 7, 1941, by Henry S. Dybas.

Paratypes.—Two females, same data as the type. One deposited in the collection of the American Museum of Natural History.

Description of female.—Dorsum, especially the abdomen, roughly granulate. Eye tubercle in the center of the cephalothorax, slightly

canaliculate; smooth above, except for a few small tubercles. Suprachelicerai lamellae prolonged into two obtuse projections. Venter and coxae granulate, with scattered hairs. Lateral teeth present on the anterior margins of coxae I to IV and on the posterior margins of coxae IV. Teeth present along the lateral margin of the genital operculum. A row of tubercles across each free sternite.

Legs stout, with scattered hairs. Small spines present on the femora and patellae. Metatarsi with false articulations. Length of femora: I, 7.4 mm.; II, 14.6 mm.; III, 8.0 mm.; IV, 12.2 mm.

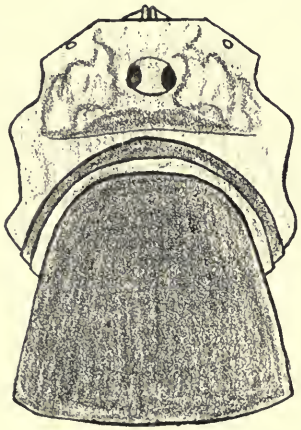

FIG. 21. *Leiobunum veracruzensis*. Dorsal view of female.

Palpus with the trochanter 0.3 mm. long, femur 1.3, patella 0.6, tibia 1.0, and tarsus 1.7. Total length 4.9 mm. Palpus covered throughout with hairs, which are particularly numerous on the distal portion of the tarsus. A few small brown spines present on the femur, patella, and tibia. No apophyses on the patella.

Chelicerae normal, with scattered hairs.

Dorsal portion of the abdomen dark shining black, metallic. Cephalothorax somewhat lighter brown with darker brown mottlings. Eye tubercle brown, with darker brown around the eyes. Venter and bases of coxae lighter, ash gray to somewhat darker. Most of coxae, trochanters, and bases of femora black. Legs dark brown. Chelicerae and palpi yellowish, but darker brown mottlings on the proximal portion of the palpi. Tips of cheliceral claws black.

Total length of body 4.0 mm., cephalothorax 1.8, width of body at widest portion 3.2.

Remarks.—*L. veracruzensis* is related to *L. ischionatutum* Dugés, differing in having the coxae black and the eye tubercle darker.

Leiobunum viridorsum Goodnight and Goodnight

Leiobunum viridorsum Goodnight and Goodnight, Amer. Mus. Nov., No. 1163, p. 13, figs. 16, 17, 1942—Mexico (Nuevo Leon, Horsetail Falls).

Mexico: Chapulhuacan, Hidalgo, June 19, 1941 (Henry S. Dybas).

Subfamily **Oligolophinae** Banks

Diguetinus spinulatus Banks

Leptobunus spinulatus Banks, Journ. N. Y. Ent. Soc., 6, p. 182, 1898—Mexico.

Mexico: El Molino, Jalisco, August 8, 1941 (Charles H. Seevers).

Subfamily **Gagrellinae** Thorell

Geaya auruginia Goodnight and Goodnight

Geaya auruginia Goodnight and Goodnight, Amer. Mus. Nov., No. 1163, p. 15, fig. 26, 1942—Mexico (La Buena Ventura, Vera Cruz).

Guatemala: Escobas (opposite Puerto Barrios), November 27, 1933 (Karl P. Schmidt).

Mexico: Jalapa, Vera Cruz, July 2, 1941 (Henry S. Dybas).

Geaya tezonapa sp. nov. Figure 22.

Type from Tezonapa, Vera Cruz, Mexico. In the collection of Chicago Natural History Museum. Female. Collected August 8, 1941, by Henry S. Dybas.

Paratype.—One female from Peñuela, Vera Cruz, Mexico. Deposited in the collection of the American Museum of Natural History. Collected July 17, 1941, by Henry S. Dybas.

Description of female.—Dorsum roughly granulate, the granulations in the form of small irregular elevations. Eye tubercle towards the posterior portion of the cephalothorax, slightly canaliculate. A row of spinose tubercles over each carina. Anterior margin of the eye tubercle straight. Supracheliceral lamellae prolonged into two projections. Venter and coxae granulate, with scattered hairs. Lateral teeth present on the anterior margins of all coxae and the posterior margins of coxae I and IV.

Legs with scattered hairs, femora with a few scattered small spines. Metatarsi with false articulations. Nodules 0–3–0–0. Nodules of second legs very small. Length of femora: I, 6.3 mm.; II, 10.8 mm.; III, 6.1 mm.; IV, 8.3 mm.

Palpus with the trochanter 0.3 mm. long, femur 1.0, patella 0.4, tibia 0.5, and tarsus 1.1. Total length 3.3 mm. Palpus clothed throughout with hairs, a few small spines scattered irregularly over the femur, patella, and tibia. The apophyses of the patella reduced to a very small blunt projection.

Chelicerae normal, clothed throughout with scattered hairs.

Dorsal portion of the abdomen yellowish brown with the granulations somewhat lighter and a few darker brown spots present as

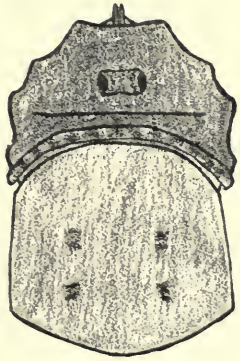

FIG. 22. *Geaya tezonapa.* Dorsal view of female.

irregular mottlings. Cephalothorax dark brown with a few small white punctations. Eye tubercle black above, dark brown at the base. Venter yellowish brown to darker brown, mottled. Coxae, trochanters, and bases of femora very dark brown. Remainder of legs yellowish brown, dark in the median portion. Palpus yellowish with much dark brown mottling on the femur, patella, and tibia. Tarsus very light, yellowish. Chelicerae yellowish with black tips on the claws.

Total length of body 3.2 mm., cephalothorax 1.1, width of body at widest portion 2.2.

Remarks.—This species is related to *Geaya ephippiata* Roewer, but differs in the color of the dorsum.

Geaya caraca sp. nov. Figure 23.

Type from San José del Avila, Caracas, Venezuela. In the collection of Chicago Natural History Museum. Male. Collected by Padre Cornelio Vogl.

Paratypes.—Thirty-seven males and females, same data as the type. Five deposited in the collection of the American Museum of Natural History.

Description of male.—Dorsum roughly granulate, the granulations in the form of small circular elevations. Eye tubercle at the posterior portion of the cephalothorax, slightly canaliculate, a row of four or five very small teeth over each carina. Supracheliceral lamellae in the form of two obtuse projections on which are several small spines. Venter and coxae roughly granulate, lateral teeth present on anterior and posterior margins of all coxae. Lateral teeth characteristically three-pronged.

Legs clothed throughout with hairs, small black spines present on trochanters, femora, patellae, and tibiae, but more numerous on the femora. Nodules 0–3–0–0. Metatarsi with false articulations. Length of femora: I, 5.2 mm.; II, 8.8 mm.; III, 5.6 mm.; IV, 7.3 mm.

Palpus with the trochanter 0.3 mm. long, femur 1.0, patella 0.4, tibia 0.6, and tarsus 1.1. Total length 3.4 mm. Palpus clothed throughout with hairs. Scattered small spines present on all segments except the tarsus. Spines larger and more numerous on the ventral portion of the femur. Patella with a very short anterior median apophysis, which appears only as a rounded projection covered with small spines.

Chelicerae normal, with scattered hairs.

Dorsum golden with darker brown mottlings on the cephalothorax, and on the median portion of the abdomen. A few very

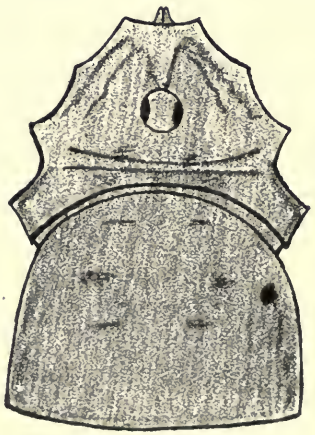

FIG. 23. *Geaya caraca.* Dorsal view of male.

dark spots posterior to the eye tubercle and along the lateral margin of the abdomen. Eye tubercle with a black ring surrounding each carina. Median groove of the eye tubercle yellowish. Venter and genital operculum dark yellow. Coxae and trochanters dark brown

to black; coxae lighter in the region of the genital operculum; remainder of legs dark brown, lighter distally. Palpi and chelicerae golden yellow.

Total length of body 3.0 mm., cephalothorax 0.9, width of body at widest portion 2.1.

Description of female.—Similar in appearance to the male, but much lighter in color. The color of the coxae is noticeably lighter than that of the male.

Total length of body 4.1 mm., cephalothorax 1.3, width of body at widest portion 2.7.

Remarks.—This species differs from *G. nigromaculata* Roewer in having small spines over the eye tubercle.

Geaya belizensis sp. nov. Figure 24.

Type from Double Falls, British Honduras. Temporarily deposited in the collection of Chicago Natural History Museum. Male. Collected November 23, 1939, by Ivan T. Sanderson.

Paratypes.—Four females from Bokowina, British Honduras. Temporarily deposited in the collection of Chicago Natural History Museum. Collected November 5, 1939, by Ivan T. Sanderson.

Description of male.—Dorsum roughly granulate. Eye tubercle canaliculate, armed only with a few very small spinules over the anterior portion of each carina. Supracheliceral lamellae in the form of two pointed projections. Coxae and venter granulate. Coxae with well-developed anterior and posterior rows of three-pronged teeth. Genital operculum with scattered hairs.

Legs long, clothed throughout with scattered hairs. Rows of very small spinules on the proximal segments. Metatarsi with false articulations. Nodules 0–3–0–0. Length of femora: I, 10.4 mm.; II, 21.3 mm.; III, 9.9 mm.; IV, 13.7 mm.

Palpus with the trochanter 0.3 mm. long, femur 1.1, patella 0.4, tibia 0.6, and tarsus 1.1. Total length 3.5 mm. Palpus clothed throughout with hairs. All segments except the tarsi with numerous scattered small spinules; a row of larger spines on the ventral margin of the femur. Patella with a short blunt median apical apophysis, 0.15 mm. long.

Chelicerae normal, with scattered hairs.

Dorsum dark brown to black. Eye tubercle dark, somewhat lighter at the base. Anterior portion of the cephalothorax with lighter brown in the median portion. A few lighter yellowish mark-

ings on the lateral margin of the cephalothorax and occasionally on the abdomen. Coxae dark brown to black, concolorous with the dorsum. Free sternites and genital operculum occasionally light yellowish, contrasting strongly with the dark coxae. In some specimens (including type) free sternites and genital operculum dark, not contrasting. Trochanters and bases of femora of legs dark, concolorous with the coxae. Remainder of legs brownish. Sometimes with lighter areas at the junction of the metatarsi and tibiae, particularly on the second leg. Chelicerae, palpi, and supracheliceral lamellae light yellowish, strongly contrasting.

FIG. 24. *Geaya belizensis*. Dorsal view of male.

Total length of body 3.0 mm., cephalothorax 1.0, width of body at widest portion 2.3.

Description of female.—Similar in appearance to the male.

Total length of body 3.9 mm., cephalothorax 1.3, width of body at widest portion 3.0.

Remarks.—This species is related to *G. nigricoxa* Roewer, but differs in that it has tubercles over the eye and a dark dorsum.

Geaya sandersoni sp. nov. Figure 25.

Type from Kate's Lagoon, British Honduras. Temporarily deposited in the collection of Chicago Natural History Museum. Male. Collected February 21, 1940, by Ivan T. Sanderson.

Paratypes.—Five males and females from Kate's Lagoon, British Honduras, February 21, 1940, and from Bokowina, British Honduras, November 5, 1939, collected by Ivan T. Sanderson. Deposited temporarily in the collection of Chicago Natural History Museum.

Description of male.—Dorsum roughly granulate, covered with small light elevations. Eye tubercle canaliculate with three or four

small spines over each carina. Supracheliceral lamellae in the form of two projections. Eye tubercle near the posterior portion of the cephalothorax. Venter and coxae roughly granulate, lateral teeth present on anterior and posterior margins of all coxae.

Legs with a few scattered hairs and small spines on the femora. Nodules 0–3–0–0. Metatarsi with false articulations. Length of femora: I, 8.5 mm.; II, 16.2 mm.; III, 8.1 mm.; IV, 14.0 mm.

Palpus with the trochanter 0.2 mm. long, femur 0.9, patella 0.4, tibia 0.5, and tarsus 1.2. Total length 3.2 mm. Palpus clothed

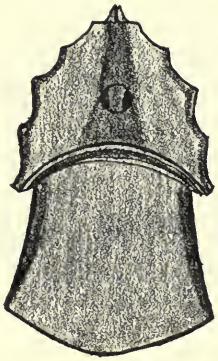

FIG. 25. *Geaya sandersoni*. Dorsal view of male.

throughout with hairs. Small spines present on all segments but the tarsus. A row of larger spines on the ventral margin of the femur. Patella with a very short rounded apical median apophysis.

Chelicerae normal, a few scattered hairs present.

Dorsum of abdomen reddish brown, margined with a black stripe. A wide black stripe beginning at the posterior portion of the cephalothorax and extending from the transverse abdominal black stripe in a broad black band to the anterior margin, enclosing the eye tubercle. Lateral portion of the cephalothorax lighter, yellowish. Eye tubercle dark. Entire dorsum covered with small lighter elevations, with considerable variation in the black markings of the dorsum; in some specimens, the cephalothorax margined in black and the black margin of the abdomen reduced to a few spots. Venter and coxae reddish brown, trochanters and bases of femora dark brown, contrasting. Legs light brown. Palpi dark brown except for the tarsi, which are yellowish. Ventral portion of the tarsi somewhat lighter. Chelicerae yellowish.

Total length of the body 2.5 mm., cephalothorax 1.0, width of body at widest portion 1.6.

Description of female.—Similar in appearance to the male, but with fewer dorsal color markings.

Total length of the body 3.3 mm., cephalothorax 1.3, width of body at widest portion 2.3.

Remarks.—*G. sandersoni* differs from *G. davisi* Goodnight and Goodnight in lacking the white markings at the distal portion of the tibiae of the legs and in having the anterior black band.

Geaya vogli sp. nov. Figure 26.

Type from San José del Avila, Caracas, Venezuela. In the collection of Chicago Natural History Museum. Female. Collected by Padre Cornelio Vogl.

Paratypes.—Two females, same data as the type. One deposited in the collection of the American Museum of Natural History.

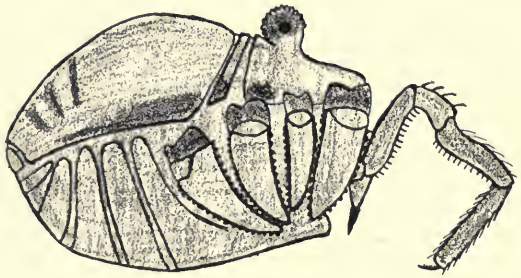

FIG. 26. *Geaya vogli*. Lateral view of female.

Description of female.—Dorsum roughly granulate, the granulations in the form of numerous slightly raised lighter minute elevations. Supracheliceral lamellae in the form of a blunt projection with several small spinules at the distal portion. Eye tubercle at the posterior portion of the cephalothorax, slightly canaliculate, a row of small spines over each carina. Coxae very roughly granulate, venter granulate. Coxae with lateral rows of teeth on anterior and posterior margins.

Legs slender, with scattered hairs. Femora with numerous small short spinules. Metatarsi with false articulations. Nodules 0–3–0–0. Length of femora: I, 9.4 mm.; II, 15.3 mm.; III, 9.0 mm.; IV, 11.7 mm.

Palpus with the trochanter 0.3 mm. long, femur 1.0, patella 0.4, tibia 0.7, and tarsus 1.3. Total length 3.7 mm. Palpus slender, with scattered hairs. All segments but the tarsus with numerous dark

spinules. A few larger spinules on the ventral portion of the femur. Patella with a short rounded median apical apophysis.

Chelicerae normal, scattered hairs present.

Dorsum golden, with dark brown spots along the lateral margin of the cephalothorax and a large dark marking on the posterior lateral portion of the abdomen. Last few abdominal segments with a dark brown spot on either side of the subobsolete median stripe. A few darker brown markings at the lateral portion of the eye tubercle and just posterior to the eye tubercle. Eye tubercle light at the base, black above, venter and coxae golden. Trochanters and bases of femora deep black, contrasting strongly with the light coxae. Remainder of legs concolorous with the dorsum. Palpi and chelicerae yellowish.

Total length of body 5.7 mm., cephalothorax 2.1, width of body at widest portion 3.2.

Remarks.—This species is related to *Geaya brunnea* Mello-Leitão, differing by having extremely long legs and by having trochanters that contrast with the coxae.

Geaya wenzeli sp. nov. Figure 27.

Type from Tezonapa, Vera Cruz, Mexico. In the collection of Chicago Natural History Museum. Male. Collected August 8, 1941, by Henry S. Dybas.

Paratypes.—Two females, same data as the type. One female from Tuxpango, Vera Cruz, Mexico, collected August 1, 1941, by Henry S. Dybas. One female from El Fortin, Vera Cruz, Mexico, collected July 8, 1941, by Henry S. Dybas. Two deposited in the collection of the American Museum of Natural History.

Description of male.—Dorsum finely granulate. Eye tubercle at the posterior portion of the cephalothorax, constricted at the base, slightly canaliculate, a few small tubercles over each carina. Supracheliceral lamellae prolonged into two obtuse projections. Venter and coxae finely granulate, with scattered hairs. Coxae with lateral teeth at anterior and posterior margins.

Legs with scattered hairs, small spines present on the femora. Nodules 0–3–0–0. Nodules small. Metatarsi with false articulations. Length of femora: I, 9.3 mm.; II, 15.0 mm.; III, 7.8 mm.; IV, 10.6 mm.

Palpus with the trochanter 0.3 mm. long, femur 1.0, patella 0.4, tibia 0.5, and tarsus 1.0. Total length 3.2 mm. Palpus clothed

throughout with hairs, a few small spines present on the ventral portion of the femur. The anterior median portion of the patella with a very short apophysis. One specimen has a longer apophysis.

Chelicerae normal, with scattered hairs.

Entire dorsum, venter, and coxae shining golden. Eye tubercle black, trochanters and bases of femora black, these black structures

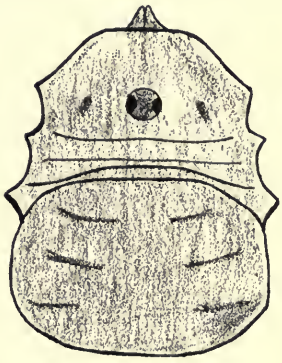

FIG. 27. *Geaya wenzeli.* Dorsal view of male.

contrasting strongly with the surface of the abdomen. Appendages yellowish. Chelicerae and tarsus of palpus lighter. Tips of the claws of the chelicerae black.

Total length of body 2.4 mm., cephalothorax 1.2, width of body at widest portion 1.9.

Description of female.—Similar in appearance to male.

Total length of body 3.6 mm., cephalothorax 1.2, width of body at widest portion 3.0.

Remarks.—*Geaya wenzeli* is related to *Geaya auruginia* Goodnight and Goodnight, but differs in size, color of the eye tubercle, and lighter color of legs.

Geaya yucatana sp. nov. Figure 28.

Type from Tekom, Yucatan, Mexico. Deposited temporarily in the collection of Chicago Natural History Museum. Male. Collected April 14, 1940, by Ivan T. Sanderson.

Paratypes.—Twenty-nine males and females, same data as the type. Deposited temporarily in the collection of Chicago Natural History Museum.

Description of male.—Dorsum granulate. Eye tubercle at the posterior portion of the cephalothorax, canaliculate, four or five small denticles over each carina. Supracheliceral lamellae in the

form of two expanded plates. Venter and coxae roughly granulate. Coxae of all legs with lateral teeth present on anterior and posterior margins.

Legs slender. Femora, patellae, and tibiae with numerous small black spines, remainder of legs with small hairs. Metatarsi with

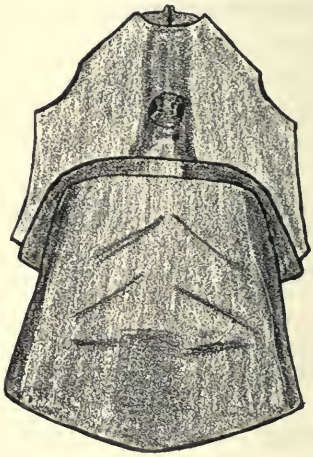

FIG. 28. *Geaya yucatana*. Dorsal view of male.

false articulations. Nodules 0–3–0–0. Nodules very small. Length of femora: I, 10.8 mm.; II, 26.1 mm.; III, 9.9 mm.; IV, 12.8 mm.

Palpus with the trochanter 0.2 mm. long, femur 1.2, patella 0.4, tibia 0.7, and tarsus 1.3. Total length 3.8 mm. Palpus clothed throughout with hair, with small black spines on all segments but the tarsi. Spines more numerous on the central portion. Patella without an apophysis, but the anterior median margin slightly swollen.

Chelicerae normal, with scattered hairs.

Dorsum golden with anterior and lateral border of dark brown, almost black, this same dark color present in a wide band across the median portion of the cephalothorax and enclosing the eye tubercle, which is likewise dark. Some darker markings occasionally present at the posterior portion of the abdomen. Lateral portion of the cephalothorax somewhat lighter than the abdomen, silvery, the rough granulations giving a shining appearance. Venter and coxae yellowish, trochanters and legs yellowish, concolorous with the coxae. Patellae of the legs somewhat darker. White bands sometimes present at the distal portion of the femora, the distal portion of the tibiae, and the proximal portion of the metatarsi of the second and fourth legs; much variation in different specimens, some lacking

white markings entirely and others having them much reduced. Palpi and chelicerae yellowish, darker brown mottlings on the patella and tibia of the palpus.

Total length of body 3.0 mm., cephalothorax 1.2, width of body at widest portion 2.2.

Description of female.—Similar in appearance to male.

Total length of body 3.8 mm., cephalothorax 1.3, width of body at widest portion 2.9.

Remarks.—This species is related to *Geaya davisi* Goodnight and Goodnight, but differs in having a dark stripe on the cephalothorax and in having the trochanters concolorous with the coxae.

Krusa gen. nov.

Genotype *Krusa mexicana* sp. nov.

Diagnosis.—Dorsum without spines. Eye tubercle with small spines over each carina. Nodules 0–1–0–0. Coxae with rows of lateral, three-pronged teeth.

Remarks.—This genus differs from other Gagrellinae by having only one nodule on the femur of the second leg.

Krusa mexicana sp. nov. Figure 29.

Type from the state of Vera Cruz, Mexico. In the collection of Chicago Natural History Museum. Male. Collected by Henry S. Dybas.

Paratypes.—A male and female, same data as the type. One male deposited in the collection of the American Museum of Natural History.

Description of male.—Dorsum roughly granulate. Eye tubercle at the posterior portion of the cephalothorax, canaliculate, with five small spines over each carina. Supracheliceral lamellae extended as two sharp projections. Venter and coxae roughly granulate. Lateral teeth present on anterior and posterior margins of all coxae.

Legs long, clothed throughout with scattered hairs. A few small spines present on femora, patellae, and tibiae. Metatarsi with false articulations. Nodules 0–1–0–0. Length of femora: I, 9.9 mm.; II, 16.7 mm.; III, 9.9 mm.; IV, 12.6 mm.

Palpus with the trochanter 0.2 mm. long, femur 0.7, patella 0.3, tibia 0.4, and tarsus 0.8. Total length 2.4 mm. Palpus clothed throughout with hairs. Small dark spines present on femur, patella,

and tibia. A ventral row of larger spines on the femur. Patella with a slender, acute apophysis.

Chelicerae normal, clothed throughout with hairs.

Dorsum black, metallic. Venter and coxae, trochanters, and bases of femora black, remainder of legs brown. A lighter band present between tibia and metatarsus of the second leg, this band very light yellow or so dark as to be scarcely discernible. All segments of the palpus, except the tarsus and the distal portion of the tibia, dark, with an occasional light mottling. Tarsus of the palpus, chelicerae, and mouth parts light yellowish, contrasting strongly. Tips of cheliceral claws black.

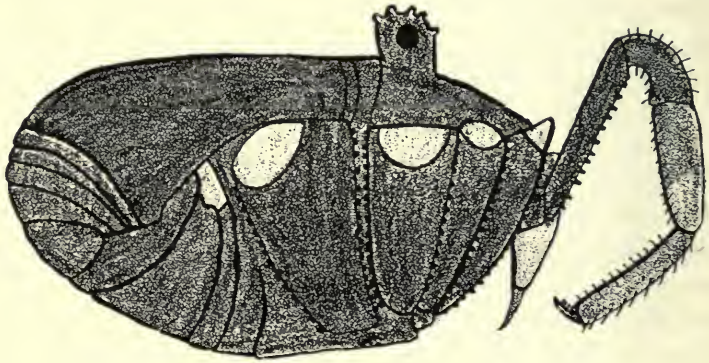

FIG. 29. *Krusa mexicana*. Lateral view of male.

Total length of body 2.1 mm., cephalothorax 1.0, width of body at widest portion 1.8.

Description of female.—Similar in appearance to the male, but with some light mottlings on the dorsum.

Total length of body 3.3 mm., cephalothorax 1.2, width of body at widest portion 2.4.

Prionostemma tekoma sp. nov. Figure 30.

Type from Tekom, Yucatan, Mexico. Deposited temporarily in the collection of Chicago Natural History Museum. Collected from low herbage lying in the sun, April 14, 1940, by Ivan T. Sanderson.

Paratypes.—Forty-three males and females, same data as the type. Temporarily deposited in the collection of Chicago Natural History Museum.

Description of male.—Dorsum roughly granulate, eye tubercle towards the posterior portion of the cephalothorax, slightly canaliculate. Scattered denticles over each carina. Supracheliceral lamellae extended as obtuse projections. Venter and coxae granulate, granulations very prominent on the coxae. Lateral rows of teeth present on anterior and posterior margins of all coxae.

Legs thread-like. Nodules 0–3–0–1. Nodules small. Femora of legs with a few small black spines. Metatarsi with false articulations. Length of femora: I, 8.5 mm.; II, 12.6 mm.; III, 7.4 mm.; IV, 11.1 mm.

FIG. 30. *Prionostemma tekoma*. Dorsal view of male.

Palpus with the trochanter 0.3 mm. long, femur 0.9, patella 0.4, tibia 0.4, and tarsus 1.0. Total length 3.0 mm. Palpus clothed throughout with hairs. A ventral row of small teeth on the femur. A very short rounded apophysis on the median anterior portion of the patella.

Chelicerae normal, with scattered hairs.

Dorsum golden with a median stripe, dark brown to black, extending down the abdominal scute. Eye tubercle black, contrasting strongly. Venter and coxae golden. Trochanters and bases of femora dark brown, strongly contrasting. Remainder of legs and other appendages concolorous with the yellow of the dorsum.

Total length of body 2.2 mm., cephalothorax 1.8, width of body at widest portion 1.8.

Description of female.—Identical in appearance with the male.

Total length of body 2.4 mm., cephalothorax 1.0, width of body at widest portion 2.1.

Remarks.—This species is related to *Prionostemma coronatum* Loman, differing in color of the dorsum and in general appearance.

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